STATE of INDIANA

INDIANA UTILITY REGULATORY COMMISSION
302 W. WASHINGTON STREET, SUITE E-306
INDIANAPOLIS, INDIANA 46204-2764

http://www.state.in.us/iurc/
Office: (317) 232-2701
Facsimile: (317) 232-6758

22 October 2004

To Whom It May Concern:

Enclosed is a copy of the Pipeline Safety Division's report on the gas explosion that occurred on April 3, 2004 at 3307 Lincoln Avenue, Evansville, Indiana. I hope this information is of assistance to you. Should you need any additional information, please feel free to contact me.

Sincerely,

Annmarie Robertson

Annmarie Robertson, Director
Pipeline Safety Division

Pipeline Failure Investigation Report

Pipeline System: Vectren Energy Delivery of Indiana **Operator:** Southern Indiana Gas & Electric Co.

Location: 20 N.W. Fourth St., Evansville, IN 47708-1724 **Date of Occurrence:** 4/03/04

Medium Released: Natural Gas **Quantity:**

OPS Arrival Time & Date: 7:10pm CST 4/03/04 **Total Damages $:** 605,000

Investigation Responsibility: [X] State [ ] OPS [ ] NTSB Other

Company Reported Apparent Cause:

[ ] Corrosion [ ] Damage by Outside Force

[ ] Damage by Natural Forces [ ] Accidentally Caused by the Operator

[ ] Construction/Material Defect [ ] Equipment Malfunction [X] Other **Unknown**

Rupture ?	[X] Yes	[ ] No
Leak ?	[X] Yes	[ ] No
Fire?	[X] Yes	[ ] No
Explosion?:	[X] Yes	[ ] No
Evacuation?:	[X] Yes	[ ] No

Number of Persons? **20** Area?

Narrative Summary

One paragraph summary description of the Incident/Accident which will give interested persons sufficient information to make them aware of the basic scenario and facts.

While changing out water meters in the area, the Evansville Water Utility or its contractor, EA-2, accessed a valve box with a lid marked "Gas" assuming it provided access to the water shut-off valve. A Water Utility employee then turned the valve within the valve box causing the failure of a 1/2" PE plastic service line serving 3307 Lincoln Ave. The valve was not turned to the closed position after the line was damaged. The gas service line had been inserted through the valve. Gas facilities had been replaced in the area in June of 2001, and abandoned facilities were used as conduits through which to install the gas new facilities. KLP Construction Company was the contractor hired by Southern Indiana Gas and Electric Company d/b/a Vectren Energy Delivery of Indiana, Inc (SIGECO) for that replacement project. The shut-off valve that had served as the original valve, through which the plasic replacement line ran, was left operational when the replacement was completed in 2001. Water Utility personnel alerted SIGECO to the fact the damage had occurred to gas facilities. In response, SIGECO dispatched a service employee (first responder) to the scene of the damaged gas service line. The employee attempted to shut the gas valve off, but was unable to do so. The employee stated by using a "Trac-it" gas detector that it gave indication the gas was venting from the valve box. The instrument cleared when held around the meter set at the house foundation. A SIGECO two-man crew was then dispatched to access the 1/2" service line and repair the damage to it. Upon arrival at the damaged gas line, the two-man crew shut the gas curb valve off, shut the gas off by squeezing off the 1/2" plastic upstream of the valve, and repaired the damaged facilities. Although no CGI (Combustible Gas Indicator) instrument was used inside or outside the above address to determine LEL, one of the SIGECO crew members attempted to re-light appliances to finalize the service restoration to 3307 Lincoln Ave. The natural gas present in the structure ignited causing an explosion. The resident of the home and a visitor were present in the home at the time of the explosion, and suffered fatal injuries. The serviceman who performed the re-light was burned and received in-patient treatment.

Region/State: Central/Indiana **Reviewed by:**

Principle Investigator: Michael A. Orr **Title:**

Date: August 24, 2004 **Date:**

Failure Location & Response

Location (City, Township, Range, County/Parish): (Acquire Map)
Evansville, T6S, R10W, Vanderburgh

Address or M.P. on Pipeline: ρ	Type of Area (Rural, City): ρ
3307 Lincoln Ave.	**City**
Date: **4/03/04**	Time of Failure: **Unknown**
Time Detected: **Unknown**	Time Located: **Vectren arrival 8:29AM CST**

How Located: **Water Utility representative smelled and heard gas blowing**

NRC Report #: (Attach Report)	Time Reported to NRC:	Reported by:
717824	**12:59 PM CST**	**Rick Slagle**

Type of Pipeline:

Gas Distribution	Gas Transmission	Hazardous Liquid	LNG
[ ] LP	[ ] Interstate Gas	[ ] Interstate Liquid	[ ] LNG Facility
[ ] Municipal	[ ] Intrastate Gas	[ ] Intrastate Liquid	
[X] Public Utility	[ ] Jurisdictional Gas Gathering	[ ] Offshore Liquid	
[ ] Master Meter	[ ] Offshore Gas	[ ] Jurisdictional Liquid Gathering	
	[ ] Offshore Gas - High H_2S	[ ] CO_2	

Pipeline Configuration (Regulator Station, Pump Station, Pipeline, etc.):
Distribution Pipeline

Operator/Owner Information

Owner: **Vectren Energy Delivery of Indiana, Inc.**	Operator: **Southern Indiana Gas & Electric Company**
Contact: **Rick Slagle**	Company Official: **Rick Scach**
Address: **1 N. Main St.**	Title: **Vice President Energy Delivery**
P.O. Box 209	Address: **1 N. Main St.**
City: **Evansville** State: **IN**	**P.O. Box 209**
Phone No.: **(812) 491-4611** Fax No.: **(812) 491-4504**	City: **Evansville** State: **IN**
DRUG TESTING	[ ] N/A
Contact: **Bill Brown**	Phone No.: **(812) 491-4160**

Damages

Product/Gas Loss or Spill(1):	Estimated Property Damage $: **600,000**
Amount Recovered:	Associated Damages(2) $: **5,000**
Estimated Amount $: **Minimal**	

Description of Property Damage:

Customers out of Service: [X] Yes [ ] No Number: **2**

Suppliers out of Service: [ ] Yes [ ] No Number:

(1) Initial Volume Lost or Spilled
(2) Including Cleanup Cost

Fatalities and Injuries

Fatalities:	[X] Yes	[ ] No	Company:	0	Contractor:	0	Public: 2
Injuries - Hospitalization:	[X] Yes	[ ] No	Company:	1	Contractor:	0	Public: 0
Injuries - Non-Hospitalization:	[X] Yes	[ ] No	Company:	0	Contractor:	0	Public: 3
Total Injuries (including Non-Hospitalization):			Company:	1	Contractor:	0	Public: 5

Name	Age	M/F	Job Function	Yrs w/ Comp.	Yrs Exp.	Type of Injury
Daisy P. Hardy	**89**	**F**	**Public**	**N/A**	**N/A**	**Fatality**
Josie Williams	**65**	**F**	**Public**	**N/A**	**N/A**	**Fatality**
Mark Rexing	**31**	**M**	**Helper**	**7**	**7**	**Burns & Smoke Inhalation**
Marvin Maxberry	**80**	**M**	**Public**	**N/A**	**N/A**	**Smoke Inhalation**
Virginia Maxberry	**80**	**F**	**Public**	**N/A**	**N/A**	**Smoke Inhalation**
Dave Ellington	**35**	**M**	**Public**	**N/A**	**N/A**	**Smoke Inhalation**

Drug/Alcohol Testing [ ] N/A

Were all employees that could have contributed to the incident, Post Accident tested within the 2 hour time frame for alcohol or the 32 hour time frame for all other drugs?

[X] Yes [ ] No

Job Function	Time of Test	Location	Results Pos.	Results Neg.	Type of Drug
First Responder	**19:36 military**	**St. Mary's Occup. Medicine**		**X**	**Results received**
Crew Member	**19:49 military**	**St. Mary's Occup. Medicine**		**X**	**Results received**

System Description

Describe the Operator's System: **60 Psig MAOP Plastic Distribution System**

Pipe Failure Description [ ] N/A

Length of Failure (inches, feet, miles): **Approximately 1-inch** ρ

Position (Top, Bottom, include position on pipe, 6 O'clock): ρ
Entire circumference

Description of Failure (Corrosion Gouge, Seam Split): ρ
Tear

Laboratory Analysis: [ ] Yes [X] No
Performed by: N/A

Preservation of Failed Section or Component: [ ] Yes [X] No
If Yes - Method:

In Custody of: **See attachment #16 for statement below.**

Develop a sketch of the area including distances from roads, houses, stress inducing factors, pipe configurations, etc. Bar Hole Test Survey Plot should be outlined with concentrations at test points. Direction of Flow.

Component Failure Description

[X] N/A

Component Failed:	ρ
Manufacturer:	Model:
Pressure Rating:	Size:
Other (Breakout Tank, Underground Storage):	

Pipe Data

[ ] N/A

Material: **PE 2406**	Wall Thickness/SDR: **0.090 inch/7/0**
Diameter (O.D.): **1/2-inch CTS**	Installation Date: **June 27, 2001**
SMYS: **N/A**	Manufacturer: **Driscopipe**
Longitudinal Seam: **N/A**	Type of Coating: **N/A**
Pipe Specifications (API 5L, ASTM A53, etc.): **ASTM D2513**	

Jointing

[X] N/A

Type:	Procedure:
NDT Method:	Inspected: [ ] Yes [ ] No

Pressure @ Time of Failure @ Failure Site

[ ] N/A

Pressure @ Failure Site: **55 PSIG**	Elevation @ Failure Site: **N/A**

Pressure Readings @ Various Locations:

Location/M.P./Station #	Pressure	Elevation	Direction from Failure Site: Upstream	Direction from Failure Site: Downstream

Upstream Pump Station Data

[X] N/A

Type of Product:	API Gravity:
Specific Gravity:	Flow Rate:
Pressure @ Time of Failure(3):	Distance to Failure Site:
High Pressure Set Point:	Low Pressure Set Point:

Upstream Compressor Station Data

[X] N/A

Specific Gravity:	Flow Rate:
Pressure @ Time of Failure(3):	Distance to Failure Site:
High Pressure Set Point:	Low Pressure Set Point:

Operating Pressure

[ ] N/A

Max. Allowable Operating Pressure: **60 Psig**	Determination of MAOP: **100 Psig air pressure test**
Actual Operating Pressure: **55 Psig**	
Method of Over Pressure Protection: **Relief**	
Relief Valve Set Point: **N/A**	Capacity Adequate?: [X] Yes [ ] No

(3) Obtain Event Logs and Pressure Recording Charts

Integrity Test After Failure — ☐ N/A

Pressure Test Conducted in place? (Conducted on Failed Components or Associated Piping): ☐ Yes ☒ No

If NO, Tested after removal?: ☐ Yes ☒ No

Method?:

Describe any failures during the test.

Pressure Test History — ☐ N/A

	Date	Test Medium	Pressure	Duration	% SMYS
Installation:	**June 27, 2001**	**Air**	**100 Psig**	**10 minutes**	**N/A**
Last:					
Other:					

Any problems occur during any of the Pressure Tests?:

None. 49 CFR 192.725 requires each service line temporarily disconnected from the main must be tested from the point of disconnection to the service line valve in the same manner as a new service line, before reconnecting; however, on April 3, 2004, SIGECO did not pressure test the service line at 3307 Lincoln Avenue.

Soil/Water Conditions @ Failure Site — ☐ N/A

Condition of and type of Soil around Failure Site (Color, Wet, Dry, Frost Depth): **Wet, Clay soil saturated with odorant at basement wall at location of meter set.**

Type of Backfill (Size and Description): **N/A**

Type of Water (Salt, Brackish): **N/A**

Water Analysis[4]: ☐ Yes ☒ No

(4) Attach Copy of Water Analysis Report

External Pipe or Component Examination — X N/A

External Corrosion?: ☐ Yes ☐ No ρ	Coating Condition (Disbonded, Non-existent): ρ
Description of Corrosion: ρ	
Description of Failure surface (Gouges, Arc Burns, Wrinkle Bends, Cracks, Stress Cracks, Chevrons, Fracture Mode, Point of Origin):	
Above Ground: ☐ Yes ☐ No ρ	Buried: ☐ Yes ☐ No ρ
Stress Inducing Factors: ρ	Depth of Cover: ρ

Cathodic Protection — X N/A

P/S (Surface):	P/S (Interface):
Soil Resistivity: pH:	Date of Installation:
Method of Protection?:	
Did the Operator have knowledge of Corrosion before the Incident?: ☐ Yes ☐ No	
How Discovered? (Close Interval Survey, Instrumented Pig, Annual Survey, Rectifier Readings):	

Internal Pipe or Component Examination — X N/A

Internal Corrosion: ☐ Yes ☐ No ρ	Injected Inhibitors: ☐ Yes ☐ No
Type of Inhibitors:	Testing: ☐ Yes ☐ No
Results (Coupon Test, Corrosion resistance Probe):	
Description of Failure surface (MIC, Pitting, Wall Thinning, Chevrons, Fracture Mode, Point of Origin):	
Cleaning Pig Program: ☐ Yes ☐ No	Gas and/or Liquid Analysis: ☐ Yes ☐ No
Results of Gas and/or Liquid Analysis[5]:	
Internal Inspection Survey: ☐ Yes ☐ No	Results[6]:
Did the Operator have knowledge of Corrosion before the Incident?: ☐ Yes ☐ No	
How Discovered? (Instrumented Pig, Coupon Testing):	

(5) Attach Copy of Gas and/or Liquid Analysis Report
(6) Attach Copy of Internal Inspection Survey Report

Outside Force Damage — [ ] N/A

Responsible Party: **Evansville Water Utility (EA2)**	Telephone No.: **(812) 421-2120**
Address: **1931 Allens Lane, Evansville, Indiana 47720**	
Work Being Performed: **Water meter replacement**	
Equipment Involved: **Curb Valve Key** ρ	Called One Call System?: [ ] Yes [X] No
One Call Name: **IUPPS**	One Call Report #(7): **N/A**
Notice Date: **N/A**	Time: **N/A**
Response Date: **N/A**	Time: **N/A**

Details of Response:

No excavation. Access to Gas facilities was gained through Gas Valve box with lid clearly marked "GAS."

Was Location Marked According to Procedures: [ ] Yes [X] No	
Pipeline Marking Type: **N/A** ρ	Location: **N/A** ρ
State Law Damage Prevention Program Followed?: [X] Yes [ ] No [ ] No State Law	
Notice Required: [ ] Yes [X] No	Response Required: [ ] Yes [X] No
Was Operator Member of State One Call?: [X] Yes [ ] No	Was Operator on Site?: [ ] Yes [X] No
Is OSHA Notification Required?: [ ] Yes [X] No	

Natural Forces — [X] N/A

Description (Earthquake, Tornado, Flooding, Erosion):

Failure Isolation — [ ] N/A

Squeeze Off/Stopple Location and Method: **Old Service Valve Operation and Squeeze Off PE Service Line** ρ

Valve Closed - Upstream: Time:	I.D.: M.P.:
Valve Closed - Downstream: Time:	I.D.: M.P.:

Pipeline Shutdown Method: [X] Manual [ ] Automatic [ ] SCADA [ ] Controller [ ] ESD

Failed Section Bypassed or Isolated: **Isolated**

Performed By: **Durbin/Rexing**	Valve Spacing:

(7) Attach Copy of One Call Report

Odorization

N/A ☐

Gas Odorized: [X] Yes [ ] No	Concentration of Odorant (Post Incident at Failure Site):
Method of Determination: **Sniff and DTEX**	% LEL: % Gas In Air: **.49 %**
	Time Taken: **3:35 PM CST**
Was Odorizer Working Prior to the Incident: [X] Yes [ ] No	Type of Odorizer (Wick, By-Pass): **Injection**
Odorant Manufacturer: **Natural Gas Odorizing** Model:	Type of Odorant: **RP Captan (V)**
Amount Injected:	Monitoring Interval (Weekly): **Daily-Sniff/ Monthly-Instr.**

Odorization History (Leaks Complaints, Low Odorant Levels, Monitoring Locations, Distances from Failure Site):
No indication of abnormalities.
See attachment #8(a) for Concentration of Odorant at site Post Incident using DTEX instrument.
See attachment #8(b) for Concentration of Odorant for SIGECO using DTEX instrument from March 26, 2004 through March 30, 2004.

Weather Conditions

N/A [X]

Temperature:	Wind (Direction & Speed):
Climate (Snow, Rain):	Humidity:
Was Incident preceded by a rapid weather change: [ ] Yes [ ] No	
Weather Conditions Prior to Incident (Cloud Cover, Ceiling Heights, Snow, Rain, Fog):	

Gas Migration Survey

N/A ☐

Bar Hole Test of Area: [X] Yes [ ] No	Equipment Used: **GMI Gasurveyor**
Method of Survey (Foundations, Curbs, Manholes, Driveways, Mains, Services)[8]: **Mains, Services, Manholes**	ρ

Environment Sensitivity Impact

N/A [X]

Location (Nearest Rivers, Body of Water, Marshlands, Wildlife Refuge, City Water Supplies that could be or were affected by the medium loss.): ρ

OPA Contingency Plan Available?: [ ] Yes [ ] No Followed?: [ ] Yes [ ] No

Class Location

N/A ☐

Class: **3**	Determination: **Population Density**
Odorization Required?: [X] Yes [ ] No	

(8) Plot on Site Description Page

Maps & Records

☐ N/A

Are Maps and Records Current?(9): [X] Yes [ ] No

Leak Survey History

☐ N/A

Leak Survey History (Trend Analysis, Leak Plots):

No leaks in area since installation of new facilities in June of 2001.

Pipeline Operation History

☐ N/A

Description (Repair or Leak Reports, Exposed Pipe Reports):

No operational issues since installation of PE system in June of 2001.

Did a Safety Related Condition Exist Prior to Failure?: [ ] Yes [X] No Reported?: [ ] Yes [ ] No

Unaccounted For Gas:

Over & Short/Line Balance (24 hr., Weekly, Monthly/Trend):

Operator/Contractor Error

☐ N/A

Name: **Williamson, Dennis / Rexing, Mark**	Job Function: **First Responder / Crew Member**
Title: **Unknown**	Years of Experience: **20yrs 6mo. / 7yrs 6mo.**

Training (Type of Training, Background): **Operator Qualification and Emergency Response Plan Training**

Type of Error (Inadvertent Operation of a Valve): **Not following Emergency Response Plan (ERP)**

Procedures that are required: **See Addendum 9(a) on following page.**

Actions that were taken: Not following ERP checklist resulting in a natural gas atmosphere inside 3307 Lincoln Ave. between LEL and UEL.

Pre-Job Meeting (Construction, Maintenance, Blow Down, Purging, Isolation): **Unknown**

Prevention of Accidental Ignition (Tag & Lock Out, Hot Weld Permit): **None**

Procedures conducted for Accidental Ignition: **Lack of use of GCI instrument to determine the percentage of gas to air inside residence of 3307 Lincoln Ave.**

Was a Company Inspector on the Job?: [ ] Yes [X] No

Was an Inspection conducted on this portion of the Job?: [ ] Yes [X] No

Additional Actions (Contributing factors may include number of hours at work prior to failure or time of day work being conducted):

See Addendum 9(b) on following two pages.

(9) Obtain Copies of Maps and Records

Procedures that are required:
Addendum 9(a)

Follow its own ERP 4.02 Emergency Response Procedures Checklist which includes maintaining evacuation of area.

49 CFR 192 requirements:

49 CFR 192.605(a) *General.* Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and emergency response.

49 CFR 192.13(c) Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part.

49 CFR 192.615(b)(2) Each operator shall train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective.

Additional Actions:
Addendum 9(b)

SIGECO has experienced other instances of the Water Utility turning gas valves causing gas leakage prior to this incident. SIGECO has not introduced the use of Excess Flow Valves as a part of all new residential service or re-newed residential service installation nor has they rendered old valves inoperable prior to the incident. See Attachment #9 for Invoice and Facilities Damage Reports charged to Evansville Water for prior non-explosive valve turning instances.

49 CFR and 170 IAC requirements:

49 CFR 192.617 Each operator shall establish procedures for analyzing accidents and failures, including the selection of samples of the failed facility or equipment for laboratory examination, where appropriate, for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence.

49 CFR 192.613(a) Each operator shall have a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning changes in class location, failures, leakage history, corrosion, substantial changes in cathodic protection requirements, and other unusual operating and maintenance conditions.

(continued on next page)

Addendum 9(b) (continued)

49 CFR 192.703 General.

(a) No person may operate a segment of pipeline, unless it is maintained in accordance with this subpart.

(b) Each segment of pipeline that becomes unsafe must be replaced, repaired, or removed from service.

(c) Hazardous leaks must be repaired promptly.

49 CFR 192.725 Each disconnected service line must be tested in the same manner as a new service line, before being reinstated.

170 IAC 5-3-1
Sec. 1. General.

(a) In accordance with Indiana Public Law 84, Acts of 1971 (IC 1971, 8-1-22.5) each intrastate gas pipeline operator, having gas facilities within the State of Indiana, shall:

(1) Construct, operate and maintain its facilities in accordance with Federal safety standards applicable to the transportation of natural and other gas and for pipeline facilities used in this transportation established and in effect, from time to time, pursuant to the Natural Gas Pipeline Safety Act of 1968 (Public Law 90-481, 49 U.S.C., 1671 et seq.) as the same may be amended, with the following supplements contained herein:

(2) Comply with any other code, standard or regulation contained herein, insofar as any code, standard or regulation is herein made applicable, and

(3) Be governed, after due notice, by any deletion, addition, revision or amendment thereof.

Operator/Contractor Error

N/A ☐

Training Procedures: **See Attachment #10(a)**

Operation Procedures:

Controller Activities:

Name	Title	Years Experience	Hours on Duty Prior to Failure	Shift

Alarm Parameters:

High/Low Pressure Shutdown:

Flow Rate:

Procedures for Clearing Alarms:

Type of Alarm:

Company Response Procedures for Abnormal Operations:

Over/Short Line Balance Procedures:

Frequency of Over/Short Line Balance:

Additional Actions:

Additional Actions Taken by the Operator

Make notes regarding the emergency and Failure Investigation Procedures (Pressure reduction, Reinforced Squeeze Off, Clean Up, Use of Evacuators, Line Purging, closing Additional Valves, Double Block and Bleed, Continue Operating downstream Pumps):

See Attachment #10(b) SIGECO Failure Investigation - Vectren Emergency Response Procedures (Pre-incident) dated 3-28-03.

See Attchment #10(c) SIGECO Post-incident Action Plan.

Photo Documentation

Overall Area from best possible view.
Pictures from the four points of the compass.
Failed Component.
Operator Actions.
Damages in Area.
Address Markings.

Photo No.	Description	Roll No.	Photo No.	Description	Roll No.
1	**Incident site facing South from Lincoln**		1		
2	**House East of incident site**		2		
3	**Incident site facing Southwest**		3		
4	**Closer to Incident site facing Southwest**		4		
5	**Incident site facing West**		5		
6	**Incident site facing Northwest**		6		
7	**Incident site facing North**		7		
8	**House West of Incident site**		8		
9	**Site and house East of site facing Northeast**		9		
10	**Southwest corner of site facing Northeast**		10		
11	**Garage south of site**		11		
12	**Incident site facing Southeast**		12		
13	**Service line terminated to house west**		13		
14	**Water valve curb box**		14		
15	**PE Main at edge of Lincoln Ave.**		15		
16	**Meter set at incident site**		16		
17	**inside piping at 3307 Lincoln Ave.**		17		
18	**Basement and Chimney at 3307 Lincoln**		18		
19	**Steel pipe used for insert at 3307 Lincoln**		19		
20	**Meter set at incident site**		20		
21	**Meter set and piping after removal**		21		
22	**Close-up Meter to 3307 Lincoln**		22		
23	**Retired Pipe at basement wall**		23		
24			24		
25			25		
26			26		
27			27		
28			28		
29			29		
30			30		
31			31		
32			32		
33			33		
34			34		
35			35		
36			36		

Type of Camera: **Digital Nikon Coolpix 2100**
Film ASA:
Video Counter Log(10):

(10) Attach Copy of Video Counter Log

Additional Information Sources

Phone Number		Name	
Police:	(812) 436-7910	Contact:	Tony Walker
Fire Dept.:	(812) 435-6235	Contact:	Jesse Storey C.F.I.
State Fire Marshall:		Contact:	
State Agency:	(317) 232-2717	Contact:	Annmarie Robertson, Director, Pipeline Safety
NTSB:	(202) 314-6000	Contact:	Rod Dyck
EPA:		Contact:	
FBI:		Contact:	
ATF:		Contact:	
OSHA:	(317) 232-1987	Contact:	Tim Crouse
Insurance Co.:	(765) 463-8586	Contact:	Darcy Smith, State Farm Insurance
FRA:		Contact:	
MMS:		Contact:	
Television:		Contact:	
Televison		Contact:	
Newspaper:		Contact:	
Other:		Contact:	

Persons Interviewed

Name	Title	Phone Number
Jesse Storey, C.F.I.	Evansville Fire Dept. Investigator	(812) 435-6235
Gerry S. Mang, CFEI	American Consulting, Inc.	(317) 547-5580
Dennis Williamson	SIGECO, First Responder	
David Durbin	SIGECO, Crew Member	
Mark Rexing	SIGECO, Crew Member	
Raymond Reed	Evansville Water Employee	
Brad Haskins	Evansville Water Employee	

Event Log

Sequence of events prior, during and after the incident by time. (Consider the events of all parties involved in the incident, Fire Department and Police reports, Operator Logs and other government agencies.)

Time	Event
7:35am	**Evansville Water Employees arrive at 3307 Lincoln Ave.**
7:40am	**Evansville Water Employee causes leak by turning valve marked "GAS."**
7:42am	**SIGECO receives call reporting leak.**
7:48am	**SIGECO employee (First Responder) dispatched to site of damaged valve.**
8:29am	**Arrival time of SIGECO personnel to site of damaged valve.**
10:55am	**Approximate time leak was repaired.**
11:10am	**Time of incident.**

See Evansville Fire Report Attachment #13

Investigation Contact Log

Time	Date	Name	Description
19:10	4/03/04	Rick Slagle	Vectren Energy Delivery of Indiana, Inc.
13:00	4/15/04	Dennis Williamson	SIGECO First Responder
13:00	4/15/04	David Durbin	SIGECO Crew Member
15:00	4/15/04	James G. Cameron, Gen Mgr	Evansville Water
08:00	4/16/04	Raymond Reed	Evansville Water Employee
08:00	4/16/04	Brad Haskins	Evansville Water Employe
09:00	5/13/04	Mark Rexing	SIGECO Crew Member

Failure Investigation Documentation Log

Operator: Unit #: CPF #: Date:

Appendix Number	Documentation Description	Date Received	FOIA Yes	FOIA No
Exhibit#8(a)	**Incident site Odorant Concentration using DTEX instrument (post)**	**6/21/04**		
Exhibit#8(b)	**SIGECO Area Odorant Concentration using DTEX 3/26-30/04**	**6/21/04**		
Exhibit#9	**Invoices and FDR Reports to Evansville Water from SIGECO**	**5/12/04**		
Exhibit#10(a)	**Operator Qualification Reports for SIGECO Employees involved**	**4/15/04**		
Exhibit#10(b)	**Vectren Emergency Response Procedures**	**8/23/04**		
Exhibit#10(c)	**SIGECO Post-Incident "Action Plan"**	**6/21/04**		
Exhibit#13	**Evansville Fire Department Report**	**6/02/04**		
Exhibit#16	**Post-Incident Gas Reading and Bar-Hole Map w/ Measurements**	**4/15/04**		

Site Description

Develop a sketch of the area including distances from roads, houses, stress inducing factors, pipe configurations, etc.. Bar Hole Test Survey Plot should be outlined with concentrations at test points. Photos should be taken from all angles with each photo documented. Additional areas may be needed in any area of this guideline.

See Exhibit # 16

DTEX Test Log

Exhibit # 8(a)

Test #:	00001	3319LINCOLN		User: JOHN BEAR	
Test Start Date:	04-03-04	<Blank>		Notes:	
Test Start Time:	15:35:30	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.12%	<Blank>		Serial Number:	00267
RDL Result:	0.49%	<Blank>	<Blank>	Test Error Code:	**
Test Time (Sec):	306	Altitude (ft): 0		Test Temp (C):	16

DTEX Test Log

Test #:	00002	3201LINCOLN		User: JOHN BEAR	
Test Start Date:	04-03-04	<Blank>		Notes:	
Test Start Time:	15:48:11	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.12%	<Blank>		Serial Number:	00267
RDL Result:	0.39%	<Blank>	<Blank>	Test Error Code:	**
Test Time (Sec):	17	Altitude (ft): 0		Test Temp (C):	17

Exhibit # 8(b)

DTEX Test Log

Test #:	00001	GRIFFIN		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	10:35:42	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.00%	GRIFFIN		Serial Number:	00266
RDL Result:	0.12%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	50	Altitude (ft): 500		Test Temp (C):	21

Test #:	00002	GRIFFIN		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	10:37:08	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	GRIFFIN		Serial Number:	00266
RDL Result:	0.31%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	30	Altitude (ft): 500		Test Temp (C):	22

Test #:	00003	FT BRANCH		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	12:08:44	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.00%	FT BRANCH		Serial Number:	00266
RDL Result:	0.04%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	64	Altitude (ft): 500		Test Temp (C):	22

Test #:	00004	FT BRANCH		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	12:10:16	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.04%	FT BRANCH		Serial Number:	00266
RDL Result:	0.32%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	20	Altitude (ft): 500		Test Temp (C):	22

Test #:	00005	PRINCETON FARMS		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	12:19:59	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.00%	FT BRANCH		Serial Number:	00266
RDL Result:	0.00%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	81	Altitude (ft): 500		Test Temp (C):	24

Test #:	00006	PRINCETON FARMS		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	12:21:46	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.02%	FT BRANCH		Serial Number:	00266
RDL Result:	0.25%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	16	Altitude (ft): 500		Test Temp (C):	24

Test #:	00007	HWY 57		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	14:13:20	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.00%	FT BRANCH		Serial Number:	00266
RDL Result:	0.12%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	59	Altitude (ft): 500		Test Temp (C):	24

Exhibit # 8(b)

DTEX Test Log

Test #:	00008	HWY 57		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	14:14:59	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	FT BRANCH		Serial Number:	00266
RDL Result:	0.43%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	18	Altitude (ft): 500		Test Temp (C):	24
Test #:	00009	HWY 261		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	14:16:20	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.00%	NEWBURGH		Serial Number:	00266
RDL Result:	0.00%	INDIANA	23345	Test Error Code:	64
Test Time (Sec):	21	Altitude (ft): 500		Test Temp (C):	24
Test #:	00010	ELBERFELD		User:	JEFF SALTZMAN
Test Start Date:	03-26-04	<Blank>		Notes:	
Test Start Time:	14:23:59	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.02%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.22%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	66	Altitude (ft): 500		Test Temp (C):	25
Test #:	00011	FIVE DOLLAR RD		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	10:47:36	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.01%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.21%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	31	Altitude (ft): 500		Test Temp (C):	13
Test #:	00012	KASSON		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	11:01:29	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.04%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.40%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	95	Altitude (ft): 500		Test Temp (C):	16
Test #:	00013	ST JOE		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	11:19:11	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.44%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	38	Altitude (ft): 500		Test Temp (C):	17
Test #:	00014	FIRST AVE		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	11:29:43	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.04%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.46%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	87	Altitude (ft): 500		Test Temp (C):	18

Exhibit # 8(b)

DTEX Test Log

Test #:	00015	CLAREMONT		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	11:56:50	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.02%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.31%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	75	Altitude (ft): 500		Test Temp (C):	18

Test #:	00016	INGLE		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	12:06:47	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.04%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.50%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	71	Altitude (ft): 500		Test Temp (C):	20

Test #:	00017	PARRETT		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	12:16:56	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.09%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.90%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	102	Altitude (ft): 500		Test Temp (C):	21

Test #:	00018	GOVERNOR		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	12:26:12	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.09%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.75%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	90	Altitude (ft): 500		Test Temp (C):	21

Test #:	00019	GILBERT		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	12:43:47	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.52%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	29	Altitude (ft): 500		Test Temp (C):	21

Test #:	00020	SOUTH BOEKE		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	14:04:00	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.05%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.46%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	133	Altitude (ft): 500		Test Temp (C):	20

Test #:	00021	COVERT		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	14:11:27	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.02%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.38%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	140	Altitude (ft): 500		Test Temp (C):	21

Exhibit # 8(b)

DTEX Test Log

Test #:	00022	POLLACK		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	14:23:42	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.02%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.36%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	109	Altitude (ft): 500		Test Temp (C):	21

Test #:	00023	FUQAUY		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	14:31:42	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.41%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	26	Altitude (ft): 500		Test Temp (C):	22

Test #:	00024	STOCKWELL		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	14:45:19	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.02%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.38%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	81	Altitude (ft): 500		Test Temp (C):	22

Test #:	00025	VANN		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	14:56:06	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.05%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.51%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	21	Altitude (ft): 500		Test Temp (C):	24

Test #:	00026	MORGAN		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	15:13:44	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.06%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.57%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	32	Altitude (ft): 500		Test Temp (C):	22

Test #:	00027	HWY 41		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	15:19:47	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.30%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	109	Altitude (ft): 500		Test Temp (C):	24

Test #:	00028	BERGDOLT		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	15:42:47	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.01%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.23%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	81	Altitude (ft): 500		Test Temp (C):	25

Exhibit # 8(b)

DTEX Test Log

Test #:	00029	DIAMOND		User:	JEFF SALTZMAN
Test Start Date:	03-29-04	<Blank>		Notes:	
Test Start Time:	16:40:43	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.01%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.27%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	16	Altitude (ft): 500		Test Temp (C):	26

Test #:	00030	ELSAS		User:	JEFF SALTZMAN
Test Start Date:	03-30-04	<Blank>		Notes:	
Test Start Time:	09:52:32	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	EVANSVILLE		Serial Number:	00266
RDL Result:	0.50%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	60	Altitude (ft): 500		Test Temp (C):	12

Test #:	00031	HWY 261		User:	JEFF SALTZMAN
Test Start Date:	03-30-04	<Blank>		Notes:	
Test Start Time:	10:17:09	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	NEWBURGH		Serial Number:	00266
RDL Result:	0.33%	INDIANA	23345	Test Error Code:	**
Test Time (Sec):	48	Altitude (ft): 500		Test Temp (C):	13

Test #:	00032	RUSTIC HILLS		User:	JEFF SALTZMAN
Test Start Date:	03-30-04	<Blank>		Notes:	
Test Start Time:	10:32:23	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	NEWBURGH		Serial Number:	00266
RDL Result:	0.34%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	14	Altitude (ft): 500		Test Temp (C):	14

Test #:	00033	HATFIELD		User:	JEFF SALTZMAN
Test Start Date:	03-30-04	<Blank>		Notes:	
Test Start Time:	14:05:10	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.03%	HATFIELD		Serial Number:	00266
RDL Result:	0.30%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	102	Altitude (ft): 500		Test Temp (C):	16

Test #:	00034	RICHLAND		User:	JEFF SALTZMAN
Test Start Date:	03-30-04	<Blank>		Notes:	
Test Start Time:	14:19:03	<Blank>		DTEX Model:	DX1000G
TDL Result:	0.01%	RICHLAND		Serial Number:	00266
RDL Result:	0.12%	INDIANA	<Blank>	Test Error Code:	**
Test Time (Sec):	49	Altitude (ft): 500		Test Temp (C):	16

SOUTHERN INDIANA GAS AND ELECTRIC COMPANY
20 N.W. FOURTH STREET
EVANSVILLE, INDIANA 47741-0001

SIGCORP SIGE
The Energy Co

TERMS:- NET 30 DAYS FROM DATE OF INVOICE 119367 DATE: February 20,1997

SERVICE COMPLETED

PLEASE RETURN THIS PORTION WITH PAYMENT

Evansville Water Works
1931 Allens Ln
Evansville, In 47711

AMOUNT DUE
$212.90

4-9-97 Pez S. Young - Disregard

NAME Evansville Water Works

ADDRESS 1931 Allens Ln
Evanvsille, In 47711

SIGCORP SIGECO
The Energy Company

SOUTHERN INDIANA GAS AND ELECTRIC COMPANY
20 N.W. FOURTH STREET
EVANSVILLE, INDIANA 47741-0001

INVOICE DATE February 20,1997

AMOUNT DUE $212.90

Bill fordamage done when contractor shut off wrong valve at curb & cut 1" plastic that was inserted for on old low pressure service (valve box had a gas lid on it).damage was done at 913 S Villa on 12/6/9
File #25252

Exhibit # 9

4-25-2001

DEBBIE -

PLEASE CHECK IF WE WERE AT THESE LOCATIONS.

Darlene Jarboe
Spoke w/ey
5-16-2001 MAG

Y

Exhibit # 9

NOW DUE

$ 866.55

Invoice No : FDR1126
Billing Date : 4/18/2001
Date of Loss : 3/7/2001

Please return this portion with your remittance

3014 109.0510 3014

NOW DUE

$ 866.55

EA2
1931
EVANS

Invoice No : FDR1126
Billing Date : 4/18/2001
Date of Loss : 3/7/2001

Invoice For Costs to Repair and Reconstruct Damaged Property

ADDRESS : 1[illegible] WASHINGTON AVENUE CITY : EVANSVILLE

PLASTIC SERVICE SEVERED BY CURB KEY.

Material	$	33.00
Company Labor		684.83
Contract Labor		0.00
Transportation/Equipment		84.24
Misc		31.47
Gas Loss		33.01
Adjustment		0.00
TOTAL AMOUNT DUE	$	866.55

3014 109.0510 3014

Voided per Darlene 5-17-01 JM Miller

RECEIVED
APR 24 2001

Remember, call two (2) full working days before digging. Contact I.U.P.P.S. at 1-800-382-5544.

SIGECO A VECTREN COMPANY

Exhibit # 9

NOW DUE	
$	207.39

EA2 SYSTEMS
1931 [illegible] LANE
EVANSVILLE IN 4772[illegible]

Invoice No : FDR0854
Billing Date : 4/18/2001
Date of Loss : 3/9/2001

Please return this portion with your remittance

014 109.0510 [illegible]

Mail Payment To: SIGECO A VECTREN COMPANY
Risk Management/Claims Department
P.O. Box 44945
Indianapolis IN 46244-0945
Inquiries 1-800-666-7238, Extension 0660, Mon - Fri 8-5
Risk Management/Claims Department

NOW DUE	
$	207.39

EA2 [illegible]
1931 [illegible]
EVANS[illegible] 4772[illegible]

Invoice No : FDR0854
Billing Date : 4/18/2001
Date of Loss : 3/9/2001

Invoice For Costs to Repair and Reconstruct Damaged Property

ADDRESS : 100 ENGLE CITY : EVANSVILLE

[illegible]/2" PLASTIC SERVICE SEVERED WHEN TURN KEY USED ON GAS.

Material	$	14.20
Company Labor		156.28
Contract Labor		0.00
Transportation/Equipment		23.40
Misc		0.00
Gas Loss		13.51
Adjustment		0.00
TOTAL AMOUNT DUE	$	207.39

Void per Darlene 5-17-2001 [signature]

3014 109.0510 3014

RECEIVED
APR 24 2001

Remember, call two (2) full working days before digging. Contact I.U.P.P.S. at 1-800-382-5544.

Form 3100 (5/00)

Exhibit # 10(a)

VECTREN CORPORATION

Date: 4/5/2004

Completed Qualification Report

Site: VEDI Evansville
Employee: Durbin, Dave

Qualification	Qualify	Requalify
Abnormal Operating Condtions	10/28/2002	10/28/2005
PEF0401.01 Corrosion Monitoring - Atmospheric/Ext./Int.: General	10/28/2002	10/28/2005
PEF0401.03 Corrosion Monitoring - Atmospheric/Ext./Int.: Ltd. (operator defined)	10/28/2002	
PEF0402.01 Coating Maintenance: General	10/28/2002	10/28/2005
PEF0402.02 Coating Maintenance: Limited (operator defined)	10/28/2002	
PEF0505.01 Cathodic Protection System Testing: General	10/28/2002	10/28/2005
PEF0505.08 Cathodic Protection System Testing: Limited (Operator Defined)	10/28/2002	
PEF0512.01 Pipe-To-Soil Testing	10/28/2002	10/28/2005
PEF0701.01 Locate/Install/Protect Cust. Meters/Regulators: Residential/Small Com	10/28/2002	10/28/2005
PEF0701.02 Locate/Install/Protect Cust. Meters/Regulators: Large Com./Industrial	10/28/2002	10/28/2005
PEF0801.01 Locating Pipelines	10/28/2002	10/28/2005
PEF0802.01 Protection During Disturbance of Segment Support	10/28/2002	10/28/2005
PEF0803.01 Inspection For Damage	10/28/2002	10/28/2005
PEF1001.01 Cast Iron Joints - Sealing: Caulked Bell and Spigot Joints	10/28/2002	10/28/2005
PEF1002.01 Plastic Pipe - Electrofusion: Couplings	2/5/2004	2/5/2005
PEF1002.02 Plastic Pipe - Electrofusion: Sidewall	2/5/2004	2/5/2005
PEF1003.01 Plastic Pipe - Butt Heat Fusion	2/5/2004	2/5/2005
PEF1004.01 Plastic Pipe - Sidewall Heat Fusion	2/5/2004	2/5/2005
PEF1005.02 Mechanical Joints - Stab Fittings	2/5/2004	2/5/2005
PEF1005.03 Mechanical Joints - Compression Couplings 2" and Less	2/5/2004	2/5/2005
PEF1005.04 Mechanical Joints - Compression Couplings Greater Than 2"	2/5/2004	2/5/2005
PEF1006.01 Plastic Pipe - Socket Heat Fusion	2/5/2004	2/5/2005
PEF1201.01 Leakage Survey: Walking	10/28/2002	10/28/2005
PEF1201.02 Leakage Survey: Mobile	10/28/2002	10/28/2005
PEF1202.01 Outside Gas Leakage Investigation, Pinpointing, and Grading	10/28/2002	10/28/2005
PEF1301.01 Leak/Strength Test - Service/Main/Trans. Line: Gas pressure <=100 psi	10/28/2002	10/28/2005
PEF1301.02 Leak/Strength Test - Service/Main/Trans. Line: Gas pressure > 100 psi	10/28/2002	10/28/2005
PEF1301.03 Leak/Strength Test - Service/Main/Trans. Line: Hydrostatic Test	10/28/2002	10/28/2005
PEF1301.04 Leak/Strength Test - Service/Main/Trans. Line: Op. Press. (soap test)	10/28/2002	10/28/2005
PEF1401.01 Abandonment or Inactivation of Facilities	10/28/2002	10/28/2005
PEF1402.01 Backfilling	10/28/2002	
PEF1405.01 Underground Clearances	10/28/2002	10/28/2005
PEF1408.01 Installation of Plastic Pipe: Direct Burial	10/28/2002	10/28/2005
PEF1408.02 Installation of Plastic Pipe: Boring	10/28/2002	10/28/2005
PEF1408.03 Installation of Plastic Pipe: Plowing/Planting	10/28/2002	10/28/2005
PEF1408.04 Installation of Plastic Pipe: Plowing/Pull-in	10/28/2002	10/28/2005
PEF1408.05 Installation of Plastic Pipe: Above Ground	10/28/2002	10/28/2005
PEF1408.06 Installation of Plastic Pipe: Insertion	10/28/2002	10/28/2005
PEF1409.01 Installation of Steel Pipe: Direct Burial	10/28/2002	10/28/2005
PEF1409.02 Installation of Steel Pipe: Boring	10/28/2002	10/28/2005
PEF1409.03 Installation of Steel Pipe: Plowing/Pull-in	10/28/2002	10/28/2005
PEF1409.04 Installation of Steel Pipe: Driving	10/28/2002	10/28/2005
PEF1409.05 Installation of Steel Pipe: Above Ground	10/28/2002	10/28/2005

Exhibit # 10(a)

VECTREN CORPORATION

Date: 4/5/2004

Completed Qualification Report

Site: VEDI Evansville
Employee: Durbin, Dave

Qualification	Qualify	Requalify
PEF1409.06 Installation of Steel Pipe: Insertion	10/28/2002	10/28/2005
PEF1410.01 Cover - Service Lines, Mains, and Transmission Lines	10/28/2002	10/28/2005
PEF1411.01 Inspection: Compliance with Procedures and Standards	10/28/2002	10/28/2005
PEF1411.02 Inspection: Inspection of Materials	10/28/2002	10/28/2005
PEF1413.01 Line Markers	10/28/2002	10/28/2005
PEF1414.01 Pipe Shutdown/Startup/Pressure Change: Bag & Stopper Cast Iron	10/28/2002	10/28/2005
PEF1414.02 Pipe Shutdown/Startup/Pressure Change: Squeeze Off Pipe	10/28/2002	10/28/2005
PEF1414.03 Pipe Shutdown/Startup/Pressure Change: Stopper Pipe	10/28/2002	10/28/2005
PEF1414.04 Pipe Shutdown/Startup/Pressure Change: Operating Identified Valve(s)	10/28/2002	10/28/2005
PEF1414.05 Pipe Shutdown/Startup/Pressure Change: Mthd(s) for Other Pipe Mtls.	10/28/2002	
PEF1415.01 Protection from Hazards	10/28/2002	10/28/2005
PEF1417.01 Protection when Minimum Cover not Met	10/28/2002	10/28/2005
PEF1418.01 Purging: Large Vol., i.e. Segment of Main or Transmission Line, Etc.	10/28/2002	10/28/2005
PEF1418.02 Purging: Small Vol., e.g. Svc. Line, Short Pipe, Compressor, etc.	10/28/2002	10/28/2005
PEF1422.01 Qualification covered by other CTS(s).., see actual CTS for reference	10/28/2002	
PEF1425.01 Tapping Cast and Ductile Iron Pipe	10/28/2002	
PEF1426.01 Tapping Steel and Plastic Pipe: Manual (self-tapping)	10/28/2002	10/28/2005
PEF1426.02 Tapping Steel and Plastic Pipe: Mechanical Tapping Equipment	10/28/2002	
PEF1427.01 Valve Maintenance: Inspection/Partial Operation	10/28/2002	10/28/2005
PEF1427.02 Valve Maintenance: Maintenance	10/28/2002	10/28/2005
PEF1431.01 Segment Removal	10/28/2002	10/28/2005
PEF1432.01 Leak Clamps and Sleeves: Bolt-on type	10/28/2002	10/28/2005
PEF2010.01 Service Line Replacement	10/28/2002	10/28/2005
PEF2010.02 Service Line Replacement: Undergrd Svc Entrance (Prereq. 2010.01)	10/28/2002	
PEF2011.01 Prevention of Accidental Ignition	10/28/2002	10/28/2005
PEF2014.01 Service Lines Not In Use and Service Discontinuance	10/28/2002	10/28/2005
PEF2302.01 Uprating Pipeline to Pressure Producing Hoop Stress < 30% SMYS	10/28/2002	10/28/2005

Exhibit # 10(a)

VECTREN CORPORATION

Date: 4/5/2004

Completed Qualification Report

Site: VEDI Evansville
Employee: Rexing, Mark

Qualification	Qualify	Requalify
Abnormal Operating Condtions	11/21/2003	11/21/2006
PEF0401.01 Corrosion Monitoring - Atmospheric/Ext./Int.: General	10/28/2002	10/28/2005
PEF0401.03 Corrosion Monitoring - Atmospheric/Ext./Int.: Ltd. (operator defined)	10/28/2002	
PEF0402.01 Coating Maintenance: General	10/28/2002	10/28/2005
PEF0402.02 Coating Maintenance: Limited (operator defined)	10/28/2002	
PEF0512.01 Pipe-To-Soil Testing	11/18/2003	11/18/2006
PEF0701.01 Locate/Install/Protect Cust. Meters/Regulators: Residential/Small Com	10/28/2002	10/28/2005
PEF0701.02 Locate/Install/Protect Cust. Meters/Regulators: Large Com./Industrial	10/28/2002	10/28/2005
PEF0801.01 Locating Pipelines	11/18/2003	11/18/2006
PEF0802.01 Protection During Disturbance of Segment Support	11/18/2003	11/18/2006
PEF0803.01 Inspection For Damage	11/18/2003	11/18/2006
PEF1001.01 Cast Iron Joints - Sealing: Caulked Bell and Spigot Joints	11/18/2003	11/18/2006
PEF1002.01 Plastic Pipe - Electrofusion: Couplings	2/5/2004	2/5/2005
PEF1002.02 Plastic Pipe - Electrofusion: Sidewall	2/5/2004	2/5/2005
PEF1003.01 Plastic Pipe - Butt Heat Fusion	2/5/2004	2/5/2005
PEF1004.01 Plastic Pipe - Sidewall Heat Fusion	2/5/2004	2/5/2005
PEF1005.02 Mechanical Joints - Stab Fittings	2/5/2004	2/5/2005
PEF1005.03 Mechanical Joints - Compression Couplings 2" and Less	2/5/2004	2/5/2005
PEF1005.04 Mechanical Joints - Compression Couplings Greater Than 2"	2/5/2004	2/5/2005
PEF1006.01 Plastic Pipe - Socket Heat Fusion	2/5/2004	2/5/2005
PEF1201.01 Leakage Survey: Walking	11/18/2003	11/18/2006
PEF1201.02 Leakage Survey: Mobile	11/18/2003	11/18/2006
PEF1202.01 Outside Gas Leakage Investigation, Pinpointing, and Grading	10/28/2002	10/28/2005
PEF1203.01 Inside Gas Leakage Investigation	11/18/2003	11/18/2006
PEF1301.01 Leak/Strength Test - Service/Main/Trans. Line: Gas pressure <=100 psi	10/28/2002	10/28/2005
PEF1301.02 Leak/Strength Test - Service/Main/Trans. Line: Gas pressure > 100 psi	11/21/2003	11/21/2006
PEF1301.03 Leak/Strength Test - Service/Main/Trans. Line: Hydrostatic Test	11/21/2003	11/21/2006
PEF1301.04 Leak/Strength Test - Service/Main/Trans. Line: Op. Press. (soap test)	11/21/2003	11/21/2006
PEF1401.01 Abandonment or Inactivation of Facilities	11/21/2003	11/21/2006
PEF1402.01 Backfilling	11/21/2003	11/21/2006
PEF1404.01 Casing Vents and Seals	11/21/2003	11/21/2006
PEF1405.01 Underground Clearances	11/21/2003	11/21/2006
PEF1408.01 Installation of Plastic Pipe: Direct Burial	10/28/2002	10/28/2005
PEF1408.02 Installation of Plastic Pipe: Boring	11/21/2003	11/21/2006
PEF1408.03 Installation of Plastic Pipe: Plowing/Planting	11/21/2003	11/21/2006
PEF1408.04 Installation of Plastic Pipe: Plowing/Pull-in	11/21/2003	11/21/2006
PEF1408.05 Installation of Plastic Pipe: Above Ground	11/21/2003	11/21/2006
PEF1408.06 Installation of Plastic Pipe: Insertion	11/21/2003	11/21/2006
PEF1409.01 Installation of Steel Pipe: Direct Burial	11/21/2003	11/21/2006
PEF1409.02 Installation of Steel Pipe: Boring	11/21/2003	11/21/2006
PEF1409.03 Installation of Steel Pipe: Plowing/Pull-in	11/21/2003	11/21/2006
PEF1409.04 Installation of Steel Pipe: Driving	11/21/2003	11/21/2006
PEF1409.05 Installation of Steel Pipe: Above Ground	11/21/2003	11/21/2006

Exhibit # 10(a)

VECTREN CORPORATION

Date: 4/5/2004

Completed Qualification Report

Site: VEDI Evansville
Employee: Rexing, Mark

Qualification	Qualify	Requalify
PEF1409.06 Installation of Steel Pipe: Insertion	11/21/2003	11/21/2006
PEF1410.01 Cover - Service Lines, Mains, and Transmission Lines	11/21/2003	11/21/2006
PEF1411.01 Inspection: Compliance with Procedures and Standards	11/21/2003	11/21/2006
PEF1411.02 Inspection: Inspection of Materials	11/21/2003	11/21/2006
PEF1413.01 Line Markers	11/21/2003	11/21/2006
PEF1414.01 Pipe Shutdown/Startup/Pressure Change: Bag & Stopper Cast Iron	11/21/2003	11/21/2006
PEF1414.02 Pipe Shutdown/Startup/Pressure Change: Squeeze Off Pipe	11/21/2003	11/21/2006
PEF1414.03 Pipe Shutdown/Startup/Pressure Change: Stopper Pipe	11/21/2003	11/21/2006
PEF1414.04 Pipe Shutdown/Startup/Pressure Change: Operating Identified Valve(s)	11/21/2003	11/21/2006
PEF1414.05 Pipe Shutdown/Startup/Pressure Change: Mthd(s) for Other Pipe Mtls.	11/21/2003	
PEF1415.01 Protection from Hazards	11/21/2003	11/21/2006
PEF1417.01 Protection when Minimum Cover not Met	11/21/2003	11/21/2006
PEF1418.01 Purging: Large Vol., i.e. Segment of Main or Transmission Line, Etc.	11/21/2003	11/21/2006
PEF1418.02 Purging: Small Vol., e.g. Svc. Line, Short Pipe, Compressor, etc.	11/21/2003	11/21/2006
PEF1425.01 Tapping Cast and Ductile Iron Pipe	11/21/2003	11/21/2006
PEF1426.01 Tapping Steel and Plastic Pipe: Manual (self-tapping)	11/21/2003	11/21/2006
PEF1426.02 Tapping Steel and Plastic Pipe: Mechanical Tapping Equipment	11/21/2003	11/21/2006
PEF1427.01 Valve Maintenance: Inspection/Partial Operation	11/21/2003	11/21/2006
PEF1427.02 Valve Maintenance: Maintenance	11/21/2003	11/21/2006
PEF1431.01 Segment Removal	11/21/2003	11/21/2006
PEF1432.01 Leak Clamps and Sleeves: Bolt-on type	11/21/2003	11/21/2006
PEF1432.02 Leak Clamps and Sleeves: Composite Sleeve (Clock Spring)	10/28/2002	10/28/2005
PEF2010.01 Service Line Replacement	11/21/2003	11/21/2006
PEF2010.02 Service Line Replacement: Undergrd Svc Entrance (Prereq. 2010.01)	11/21/2003	11/21/2008
PEF2011.01 Prevention of Accidental Ignition	11/21/2003	11/21/2006
PEF2014.01 Service Lines Not In Use and Service Discontinuance	11/21/2003	11/21/2006
PEF2302.01 Uprating Pipeline to Pressure Producing Hoop Stress < 30% SMYS	11/21/2003	11/21/2006

Exhibit # 10(a)

VECTREN CORPORATION

Date: 4/5/2004

Completed Qualification Report

Site: VEDI Evansville
Employee: Williamson, Dennis

Qualification	Qualify	Requalify
Abnormal Operating Condtions	10/28/2002	10/28/2005
PEF0401.01 Corrosion Monitoring - Atmospheric/Ext./Int.: General	10/28/2002	10/28/2005
PEF0402.01 Coating Maintenance: General	10/28/2002	10/28/2005
PEF0402.02 Coating Maintenance: Limited (operator defined)	10/28/2002	
PEF0501.02 Cathodic Protection System Maintenance: Rectifiers	10/28/2002	10/28/2005
PEF0501.03 Cathodic Protection System Maintenance: Electrical Isolation	10/28/2002	10/28/2005
PEF0501.04 Cathodic Protection System Maintenance: Anodes/Anode Ground Beds	10/28/2002	10/28/2005
PEF0501.05 Cathodic Protection System Maintenance: Diodes	10/28/2002	10/28/2005
PEF0501.06 Cathodic Protection System Maintenance: Reverse Current Switches	10/28/2002	10/28/2005
PEF0503.01 Cathodic Protection System - Electrical Connections	10/28/2002	10/28/2005
PEF0505.01 Cathodic Protection System Testing: General	10/28/2002	10/28/2005
PEF0511.01 Soil ResistivityTesting	10/28/2002	10/28/2005
PEF0512.01 Pipe-To-Soil Testing	10/28/2002	10/28/2005
PEF0701.01 Locate/Install/Protect Cust. Meters/Regulators: Residential/Small Com	10/28/2002	10/28/2005
PEF0701.02 Locate/Install/Protect Cust. Meters/Regulators: Large Com./Industrial	10/28/2002	10/28/2005
PEF0702.01 Customer Pressure Regulate/Limit/Relief - O&M: Residential/Small Comm	10/28/2002	10/28/2005
PEF0702.02 Customer Pressure Regulate/Limit/Relief - O&M: Large Comm/Industrial	10/28/2002	10/28/2005
PEF0801.01 Locating Pipelines	10/28/2002	10/28/2005
PEF0803.01 Inspection For Damage	10/28/2002	10/28/2005
PEF0901.01 System Patrolling	10/28/2002	10/28/2005
PEF1201.01 Leakage Survey: Walking	10/28/2002	
PEF1201.02 Leakage Survey: Mobile	10/28/2002	
PEF1202.01 Outside Gas Leakage Investigation, Pinpointing, and Grading	10/28/2002	10/28/2005
PEF1203.01 Inside Gas Leakage Investigation	10/28/2002	10/28/2005
PEF1301.01 Leak/Strength Test - Service/Main/Trans. Line: Gas pressure <=100 psi	10/28/2002	10/28/2005
PEF1301.02 Leak/Strength Test - Service/Main/Trans. Line: Gas pressure > 100 psi	10/28/2002	10/28/2005
PEF1301.03 Leak/Strength Test - Service/Main/Trans. Line: Hydrostatic Test	10/28/2002	10/28/2005
PEF1301.04 Leak/Strength Test - Service/Main/Trans. Line: Op. Press. (soap test)	10/28/2002	10/28/2005
PEF1401.01 Abandonment or Inactivation of Facilities	10/28/2002	10/28/2005
PEF1402.01 Backfilling	10/28/2002	10/28/2005
PEF1405.01 Underground Clearances	10/28/2002	10/28/2005
PEF1408.01 Installation of Plastic Pipe: Direct Burial	10/28/2002	10/28/2005
PEF1409.01 Installation of Steel Pipe: Direct Burial	10/28/2002	
PEF1409.05 Installation of Steel Pipe: Above Ground	10/28/2002	
PEF1410.01 Cover - Service Lines, Mains, and Transmission Lines	10/28/2002	10/28/2005
PEF1411.01 Inspection: Compliance with Procedures and Standards	10/28/2002	10/28/2005
PEF1411.02 Inspection: Inspection of Materials	10/28/2002	10/28/2005
PEF1413.01 Line Markers	10/28/2002	10/28/2005
PEF1414.02 Pipe Shutdown/Startup/Pressure Change: Squeeze Off Pipe	10/28/2002	10/28/2005
PEF1414.04 Pipe Shutdown/Startup/Pressure Change: Operating Identified Valve(s)	10/28/2002	10/28/2005
PEF1415.01 Protection from Hazards	10/28/2002	10/28/2005
PEF1418.01 Purging: Large Vol., i.e. Segment of Main or Transmission Line, Etc.	10/28/2002	10/28/2005
PEF1418.02 Purging: Small Vol., e.g. Svc. Line, Short Pipe, Compressor, etc.	10/28/2002	10/28/2005

Exhibit # 10(a)

VECTREN CORPORATION

Date: 4/5/2004

Completed Qualification Report

Site: VEDI Evansville
Employee: Williamson, Dennis

Qualification	Qualify	Requalify
PEF1424.01 Support, Expansion Joint and Anchor Maintenance - Exposed Pipeline	10/28/2002	10/28/2005
PEF1426.01 Tapping Steel and Plastic Pipe: Manual (self-tapping)	1/1/2999	1/1/3002
PEF1426.02 Tapping Steel and Plastic Pipe: Mechanical Tapping Equipment	10/28/2002	
PEF1427.01 Valve Maintenance: Inspection/Partial Operation	10/28/2002	10/28/2005
PEF1427.02 Valve Maintenance: Maintenance	10/28/2002	
PEF1432.01 Leak Clamps and Sleeves: Bolt-on type	10/28/2002	
PEF1501.01 Odorization - Mains and Transmission Lines: Periodic Sampling	10/28/2002	10/28/2005
PEF1501.02 Odorization - Mains and Transmission Lines: Odorizer Maintenance	10/28/2002	10/28/2005
PEF1802.01 Vault Maintenance	10/28/2002	10/28/2005
PEF1803.01 Pressure Regulating, Limiting, and Relief Device - O&M	10/28/2002	
PEF2011.01 Prevention of Accidental Ignition	10/28/2002	10/28/2005
PEF2014.01 Service Lines Not In Use and Service Discontinuance	10/28/2002	10/28/2005
PEF2302.01 Uprating Pipeline to Pressure Producing Hoop Stress < 30% SMYS	10/28/2002	

Deleted: 16
Inserted: 16
Deleted: 1

THIS SECTION PROVIDES STANDARD PROCEDURES for performing first response activities in emergency situations.

Exhibit # 10(b)

GENERAL

Emergencies and public safety situations demand competent and confident action by First Responders using established procedures and good judgment to protect life first, then property. This section provides standard procedures for performing first response activities for emergency situations.

DEFINITION OF "FIRST RESPONDER"

The FIRST RESPONDER is *the first company person on the scene equipped to handle an emergency or public safety situation.*

The First Responder is expected to carry out the steps necessary to deal with the situation until the emergency or public safety situation ends, or until a Supervisor, recognized public official, or emergency authority **verbally** assumes control.

FIRST RESPONDER ACTIVITIES

To assist the First Responder, a checklist has been developed (see Exhibit "A"). This checklist should help the First Responder focus on the important activities involved in most emergencies. Remember, however, that the Checklist is intended only as a job aid, and that each situation is unique, therefore, response activities may be different from those listed, may need to be performed in a different order, or may include steps not listed. Also, emergencies and incidents may occur which are not specifically addressed in this section. Therefore, response personnel are expected to apply their knowledge and experience as appropriate, use established procedures if applicable and exercise good judgment to protect life first, then property. Refer to the pages following the First Responder Checklist, for expanded information on these topics.

USING THE FIRST RESPONDER CHECKLIST

The First Responder Checklist provides guidance in responding to emergency or public safety situations. It lists certain emergencies and indicates the steps normally involved in making them safe. First response activities for listed emergencies begin with the steps numbered 1 through 4 in the upper portion of the Checklist.

Beyond these four steps, however, the first response activities required for the listed emergencies (A through F), as indicated on the checklist may vary. The ongoing steps normally required to be taken by the First Responder are indicated by numbers in the column under the letter identification of the listed emergency.

Deleted: 1

Exhibit "A"

FIRST RESPONDER Checklist

Intended only as a job aid. Refer to the Emergency Response Plan, section 4, in particular section 4.02, for full policy information.

The FIRST RESPONDER *is the first person on the scene equipped to handle an emergency or public safety situation.* ***When responding to...*** τ

A	NATURAL GAS in or near a building (p. 3)	B	FIRE / EXPLOSION near or directly involving a pipeline facility (p. 5)	C	ACT-OF-NATURE/VANDALISM/TERRORISM (p. 7)
D	OUTAGE or INTERRUPTION in supply or delivery of gas (p. 10)	E	OVERPRESSURIZATION (p. 12)	F	CUT LINE / RELEASE OF GAS (p. 14)

...the First Responder should... τ

F	OR SAFETY
I	**NVESTIGATE** *the existence and initial extent of the emergency*
R	**EMOVE** *persons from the scene (including yourself) if appropriate*
S	**EEK** *supervisory guidance and/or summon help when appropriate*
T	**URN OFF** *gas facilities if safe and appropriate*

Then... τ

Consider blocking off area, rerouting public, etc. (keep onlookers away while the situation may be unsafe).
Eliminate ignition sources to the extent possible if gas is present in air.
Determine if meter is registering, obtain reading and shut off meter
Ventilate the atmosphere if safe and appropriate to do so.
Determine reason for the outage/overpressure.
Verify that the situation will not become unstable and effect existing gas pressure conditions.
Check affected area for leakage in buildings; over mains, services, manholes, and other openings. Also check adjacent buildings.
Repair, shut off, or make safe any source of leaking gas.
Consult with fire, police, or other emergency personnel to determine cause and/or coordinate further response.
If safe, conduct or assist with continuing response activities as warranted.
Complete or assist with completion of appropriate documentation.
First Responder activities end when the emergency ends, or when a company or public official or emergency authority verbally assumes control.

NOTES: In responding to any emergency, remember that each situation is unique--therefore, response activities may be different from those listed, may need to be performed in a different order, or may include steps not listed. Also, emergencies and incidents may occur which are not specifically addressed in this section. Therefore, response personnel are expected to apply their knowledge and experience as appropriate, use established procedures if applicable, and of course, exercise good judgment to protect life first, then property

REMEMBER, NATURAL GAS:

- ignites at approximately 1100 degrees F.
- rises in air while most other gases pool near ground level
- has an explosive range between 4 and 15 percent gas-in-air
- odorant is highly flammable

A. NATURAL GAS in or near a building

Natural Gas in or near a building includes such things as, but not limited to the following: sewer transections, release of gas or leakage from customer or company facilities.

	FOR SAFETY...	
1.	**INVESTIGATE** *existence and extent of emergency*	Determine that the emergency exists at the location dispatched. Also, determine how extensive or serious the emergency is with a preliminary investigation. Any reading obtained with a CGI inside a building is considered an emergency.
2.	**REMOVE** *persons from the scene (including yourself) if appropriate*	Be aware of the possibility that persons may need to be removed from the scene in the interest of safety. Use care to NOT activate any electrical device that could spark ignition. Remember that an unsafe or unstable situation may require that company personnel should stay away from the scene.
3.	**SEEK** *supervisory guidance and/or situation help from others when appropriate*	If the situation is serious enough, inform dispatching and seek guidance and/or assistance from supervision and other personnel. If preliminary information indicates the need for additional response personnel or equipment, consider informing supervision before arriving on the scene.
4.	**TURN OFF** *gas facilities if safe and appropriate*	If the situation warrants, and if safe to do so, turn off gas facilities to the area which is vulnerable or affected by the emergency. While it may be necessary for a wider area of the system to be shut down, this is most likely a decision the Supervisor should be asked to make, whenever time and conditions permit. CAUTION: DO NOT turn off gas facilities unless the effect of the turn-off is known.

THEN... τ

5.	***Consider blocking off area, rerouting public, etc. (keep onlookers away while the situation may be unsafe).***	Consider if it is advisable to block off the area or reroute public presence. Ensure that anyone removed from the area stays away while the situation remains unsafe.
6.	***Eliminate ignition sources to the extent possible if gas is present in air.***	Attempt to determine the status of ignition sources in the area, and if safe and appropriate to do so, eliminate these source(s) if gas is present in the air. If it is necessary to contact other utilities such as electric, phone, or cable, make the call(s) from outside the gaseous environment.

7.	***Ventilate the atmosphere if safe and appropriate to do so.***	If gas is present in air, ventilate the atmosphere if safe and appropriate. This may include removing manhole covers, barholing, installing vent holes, opening windows and/or doors or other means. *If the detected concentration of gas in air is above or within the explosive range (4-15 percent of natural gas), DO NOT ventilate the atmosphere until all ignition sources have been eliminated.* Ventilating the atmosphere under such conditions will at some point bring the concentration into the flammable range. If the ignition sources are not removed prior to this, the environment could become explosive.
8.	***Check affected area for leakage in buildings; over mains, services, manholes, and other openings. Also check other buildings in the vicinity.***	With appropriate equipment, survey the affected area over mains, services, manholes, and other openings. Pay particular attention to areas of recent excavation for signs of leakage. Check inside buildings at the location of the emergency, and check other buildings in the vicinity. Keep in mind that any explosion in close proximity could effect gas facilities. DO NOT use an FI unit inside a building.
9.	***Repair, shut off, or make safe any source of leaking gas.***	If leakage is detected and situation allows, repair, shut off, or make safe any source of leaking gas. Note time made safe and notify dispatch/supervision, otherwise await assistance from other personnel. Wear flash gear, if appropriate
10.	***Consult with fire, police, or other emergency personnel to determine cause and/or coordinate further response.***	Work with other on-scene emergency personnel to coordinate and conduct ongoing response activities, including crowd control if necessary. Refer media inquiries to supervision or designated media contact.
11.	***If safe, conduct or assist with continuing response activities as the situation warrants.***	Depending on the situation, additional response activities may be warranted. Perform or assist with such activities if safe and appropriate to do so.
12.	***Complete or assist with completion of appropriate documentation.***	Gather initial information and complete, or assist in the completion of documentation as required by the situation possibly including, but not limited to: Work Tickets, Customer Listings, Outage Reports, Public Accident Report/Claim Notice, Report of Damage to Company Property/Plant, and the "Natural Gas Incident Report". Refer to the "Internal Incident Reporting Matrix" to determine reporting requirements. (see Section 3.01 - Exhibit "B").

Deleted: *at or*

Deleted: *15 percent*

Deleted: *the Upper Explosive Limit*

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

First Responder activities end when the emergency or public safety situation ends, or when a superior or recognized public official or emergency authority verbally assumes control.

B. FIRE/EXPLOSION near or involving gas facility

	FOR SAFETY	
1.	**INVESTIGATE** *existence and extent of emergency*	Determine that the emergency exists at the location dispatched. Also, determine how extensive or serious the emergency is with a preliminary investigation. Any reading obtained with a CGI inside a building is considered an emergency.
2.	**REMOVE** *persons from the scene (including yourself) if appropriate*	Be aware of the possibility that persons may need to be removed from the scene in the interest of safety. Use care to NOT activate any electrical device that could spark ignition. Remember that an unsafe or unstable situation may require that company personnel should stay away from the scene.
3.	**SEEK** *supervisory guidance and/or summon help from others when appropriate*	If the situation is serious enough, inform dispatching and seek guidance and/or assistance from supervision and other personnel. If preliminary information indicates the need for additional response personnel or equipment, consider informing supervision before arriving on the scene.
4.	**TURN OFF** *gas facilities if safe and appropriate*	If the situation warrants, and if safe to do so, turn off gas facilities to the area which is vulnerable or affected by the emergency. While it may be necessary for a wider area of the system to be shut down, this is most likely a decision the Supervisor should be asked to make, whenever time and conditions permit. CAUTION: DO NOT turn off gas facilities unless the effect of the turn-off is known.

THEN...

5.	***Consider blocking off area, rerouting public, etc. (keep onlookers away while the situation may be unsafe).***	Consider if it is advisable to block off the area or reroute public presence. Remember that natural gas may migrate below ground to another venting point. Ensure that anyone removed from the area stays away while the situation remains unsafe.
6.	***Eliminate ignition sources to the extent possible if gas is present in air.***	Attempt to determine the status of ignition sources in the area, and if safe and appropriate to do so, eliminate these source(s) if gas is present in the air. If it is necessary to contact other utilities such as electric, phone, or cable, make the call(s) from outside the gaseous environment.
7.	***Determine if the meter is registering, shut off the meter if appropriate, and obtain meter readings if possible.***	Because it may be important in a fire or explosion investigation, determine if the meter is showing registration. Also, it will probably be necessary to turn off the meter so gas does not feed the fire or contribute to additional potential hazards. Obtain a meter reading if at all possible.

8.	***Check affected area for leakage in buildings; over mains, services, manholes, and other openings. Also check other buildings in the vicinity.***	With appropriate equipment, survey the affected area over mains, services, manholes, and other openings. Pay particular attention to areas of recent excavation for signs of leakage. Check inside buildings at the location of the emergency, and check other buildings in the vicinity. Keep in mind that any explosion in close proximity could effect gas facilities. DO NOT use an FI unit inside a building.
9.	***Repair, shut off, or make safe any source of leaking gas.***	If leakage is detected and situation allows, repair, shut off, or make safe any source of leaking gas. Note time made safe and notify dispatch/supervision, otherwise await assistance from other personnel. Wear flash gear, if appropriate
10.	***Consult with fire, police, or other emergency personnel to determine cause and/or coordinate further response.***	Work with other on-scene emergency personnel to coordinate and conduct ongoing response activities, including crowd control if necessary. Refer media inquiries to supervision, or designated media contact.
11.	***If safe, conduct or assist with continuing response activities as the situation warrants.***	Depending on the situation, additional response activities may be warranted. Perform or assist with such activities if safe and appropriate to do so, including participating in an investigation if directed by the Supervisor.
12.	***Complete or assist with completion of appropriate documentation.***	Gather initial information and complete, or assist in the completion of documentation as required by the situation possibly including, but not limited to: Work Tickets, Customer Listings, Outage Reports, Public Accident Report/Claim Notice, Report of Damage to Company Property/Plant, and the "Natural Gas Incident Report". Refer to the "Internal Incident Reporting Matrix" to determine reporting requirements. (see Section 3.01 - Exhibit "B")

[redacted]

[redacted]

C. ACT OF NATURE/VANDALISM/TERRORISM

Acts of Nature include Floods, Tornadoes, Earthquakes, and other large-scale natural disasters, which may adversely impact the normal operation of company facilities.

	FOR SAFETY	
1.	**INVESTIGATE** *existence and extent of emergency*	Determine that the emergency exists at the location dispatched. Also, determine how extensive or serious the emergency is with a preliminary investigation. Any reading obtained with a CGI inside a building is considered an emergency.
2.	**REMOVE** *persons from the scene (including yourself) if appropriate*	Be aware of the possibility that persons may need to be removed from the scene in the interest of safety. Use care to NOT activate any electrical device that could spark ignition. Remember that an unsafe or unstable situation may require that company personnel should stay away from the scene.
3.	**SEEK** *supervisory guidance and/or minimum help from others when appropriate*	If the situation is serious enough, inform dispatching and seek guidance and/or assistance from supervision and other personnel. If preliminary information indicates the need for additional response personnel or equipment, consider informing supervision before arriving on the scene.
4.	**TURN OFF** *gas facilities if safe and appropriate*	If the situation warrants, and if safe to do so, turn off gas facilities to the area which is vulnerable or affected by the emergency. CAUTION: DO NOT turn off gas facilities unless the effect of the turn-off is known. If the immediate area is, or is likely to become, inaccessible in the aftermath of an emergency, mainline or regulator station valves may need to be used to eliminate gas leaks and/or fires. This is most likely a decision the Supervisor should be asked to make, whenever time and conditions permit.

THEN...

5.	***Consider blocking off area, rerouting public, etc. (keep onlookers away while the situation may be unsafe).***	Consider if it is advisable to block off the area or reroute public presence. Remember that natural gas may migrate below ground to another venting point. Ensure that anyone removed from the area stays away while the situation remains unsafe.
6.	***Eliminate ignition sources to the extent possible if gas is present in air.***	Attempt to determine the status of ignition sources in the area, and if safe and appropriate to do so, eliminate these source(s) if gas is present in the air. If it is necessary to contact other utilities such as electric, phone, or cable, make the call(s) from outside the gaseous environment.

7.	***Verify that the situation will not become unstable and effect existing gas pressure conditions.***	Evaluate conditions for stability. If they appear to be unstable, and the instability may create a more hazardous situation, call for assistance if additional help has not already been summoned. Otherwise, take further actions to stabilize the situation only if it is known what the full effects of those actions will be. While it may be necessary for a wider area of the transmission or distribution system to be shut down, this is most likely a decision the Supervisor should be asked to make, whenever time and conditions permit.
8.	***Check affected area for leakage in buildings; over mains, services, manholes, and other openings. Also check other buildings in the vicinity.***	With appropriate equipment, survey the affected area over mains, services, manholes, and other openings. Pay particular attention to areas of recent excavation for signs of leakage. Check inside buildings at the location of the emergency, and check other buildings in the vicinity. Keep in mind that any explosion in close proximity could effect gas facilities. DO NOT use an FI unit inside a building.
9.	***Repair, shut off, or make safe any source of leaking gas.***	If leakage is detected and situation allows, repair, shut off, or make safe any source of leaking gas. Note time made safe and notify dispatch/supervision, otherwise await assistance from other personnel. Wear flash gear, if appropriate
10.	***Consult with fire, police, or other emergency personnel to determine cause and/or coordinate further response.***	Work with other on-scene emergency personnel to coordinate and conduct ongoing response activities, including crowd control if necessary. Refer media inquiries to supervision or designated media contact.
11.	***If safe, conduct or assist with continuing response activities as the situation warrants.***	Depending on the situation, additional response activities may be warranted. Perform or assist with such activities if safe and appropriate to do so. In the event of flooding, if it is not expected to make the area inaccessible, provide for continued service. If, however, facilities are expected to become submerged, extend vents on house regulators and/or regulator stations if possible and as necessary. Relief stacks may also need extended. It may also be necessary and advisable to remove meters and cap or plug risers, fuel lines, etc. before they are submerged.

12.	***Complete or assist with completion of appropriate documentation.***	Gather initial information and complete, or assist in the completion of documentation as required by the situation possibly including, but not limited to: Work Tickets, Customer Listings, Outage Reports, Public Accident Report/Claim Notice, Report of Damage to Company Property/Plant, and the "Natural Gas Incident Report". Refer to the "Internal Incident Reporting Matrix" to determine reporting requirements. (see Section 3.01 - Exhibit "B")

D – OUTAGE OR INTERRUPTION in supply or delivery of gas

FOR SAFETY

1.	**INVESTIGATE** *existence and extent of emergency*	Determine that the emergency exists at the location dispatched. Also, determine how extensive or serious the emergency is with a preliminary investigation. Any reading obtained with a CGI inside a building is considered an emergency.
2.	**REMOVE** *persons from the scene (including yourself) if appropriate*	Be aware of the possibility that persons may need to be removed from the scene in the interest of safety. Use care to NOT activate any electrical device that could spark ignition. Remember that an unsafe or unstable situation may require that company personnel should stay away from the scene.
3.	**SEEK** *supervisory guidance and/or summon help from others when appropriate*	If the situation is serious enough, inform dispatching and seek guidance and/or assistance from supervision and other personnel. If preliminary information indicates the need for additional response personnel or equipment, consider informing supervision before arriving on the scene.
4.	**TURN OFF** *gas facilities if safe and appropriate*	If the situation warrants, and if safe to do so, turn off gas facilities to the area which is vulnerable or affected by the emergency. While it may be necessary for a wider area of the system to be shut down, this is most likely a decision the Supervisor should be asked to make, whenever time and conditions permit. CAUTION: DO NOT turn off gas facilities unless the effect of the turn-off is known.

THEN... τ

5.	***Determine the reason for the outage or interruption.***	Attempt to determine the reason for the outage or interruption. Sometimes this will be obvious and easily determined. It may be necessary, however, to call for assistance with this step, if additional help has not already been summoned. Possible causes of interruptions include: • regulator failure at purchase points, town borders, or distribution stations • natural disasters (see also First Response item "C") *Continued*

5.	***Determine the reason for the outage or interruption***	continued • vandalism (see also First Response item "C") • damage to facilities (see also First Response item "F") • operator error Gather as much information as possible to expedite corrective action. Use gauges to determine system pressure at critical locations. Refer to system maps to identify valves, regulator stations, and feeds that supply the affected area. Try to identify the affected area.
6.	***Verify that the situation will not become unstable and effect existing gas pressure conditions.***	Evaluate conditions for stability. If they appear to be unstable, and the instability may create a more hazardous situation, call for assistance if additional help has not already been summoned. Otherwise, take further actions to stabilize the situation only if it is known what the full effects of those actions will be. While it may be necessary for a wider area of the transmission or distribution system to be shut down, this is most likely a decision the Supervisor should be asked to make, whenever time and conditions permit.
7.	***Consult with fire, police, or other emergency personnel to determine cause and/or coordinate further response.***	Work with other on-scene emergency personnel to coordinate and conduct ongoing response activities, including crowd control if necessary. Refer media inquiries to supervision, or designated media contact.
8.	***If safe, conduct or assist with continuing response activities as the situation warrants.***	Depending on the situation, additional response activities may be warranted. Perform or assist with such activities if safe and appropriate to do so.
9.	***Complete or assist with completion of appropriate documentation.***	Gather initial information and complete, or assist in the completion of documentation as required by the situation possibly including, but not limited to: Work Tickets, Customer Listings, Outage Reports, Public Accident Report/Claim Notice, Report of Damage to Company Property/Plant, and the "Natural Gas Incident Report". Refer to the "Internal Incident Reporting Matrix" to determine reporting requirements. (see Section 3.01 - Exhibit "B")

[redacted]

E. OVERPRESSURIZATION

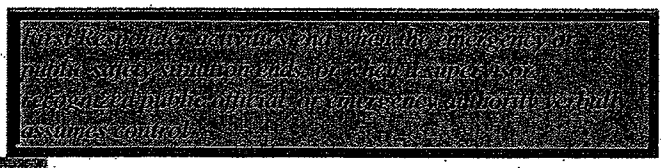
	FOR SAFETY	
1.	**INVESTIGATE** *existence and extent of emergency*	Determine that the emergency exists at the location dispatched. Also, determine how extensive or serious the emergency is with a preliminary investigation. Any reading obtained with a CGI inside a building is considered an emergency.
2.	**REMOVE** *persons from the scene (including yourself) if appropriate*	Be aware of the possibility that persons may need to be removed from the scene in the interest of safety. Use care to NOT activate any electrical device that could spark ignition. Remember that an unsafe or unstable situation may require that company personnel should stay away from the scene.
3.	**SEEK** *supervisory guidance and/or additional help from others when appropriate*	If the situation is serious enough, inform dispatching and seek guidance and/or assistance from supervision and other personnel. If preliminary information indicates the need for additional response personnel or equipment, consider informing supervision before arriving on the scene.
4.	**TURN OFF** *gas facilities if safe and appropriate*	If the situation warrants, and if safe to do so, turn off gas facilities to the area which is vulnerable or affected by the emergency. CAUTION: DO NOT turn off gas facilities unless the effect of the turn-off is known.

THEN...

5.	***Consider blocking off area, rerouting public, etc. (keep onlookers away while the situation may be unsafe).***	Consider if it is advisable to block off the area or reroute public presence. Remember that natural gas may migrate below ground to another venting point. Ensure that anyone removed from the area stays away while the situation remains unsafe.
6.	***Eliminate ignition sources to the extent possible if gas is present in air.***	Attempt to determine the status of ignition sources in the area, and if safe and appropriate to do so, eliminate these source(s) if gas is present in the air. If it is necessary to contact other utilities such as electric, phone, or cable, make the call(s) from outside the gaseous environment.
7.	***Ventilate the atmosphere if safe and appropriate to do so.***	If gas is present in air, ventilate the atmosphere if safe and appropriate. This may include removing manhole covers, barholing, installing vent holes, opening windows and/or doors or other means. *If the detected concentration of gas in air is above or within the explosive range (4- 15 percent of natural gas), DO NOT ventilate the atmosphere until all ignition sources have been eliminated.* Ventilating the atmosphere under such conditions will at some point bring the concentration into the flammable range. If the ignition sources are not removed prior to this, the environment could become explosive.

Deleted: *at or*
Deleted: *15 percent*
Deleted: *the Upper Explosive Limit*

8.	***Determine the reason for the overpressurization.***	Attempt to determine the reason for the overpressurization. Sometimes this will be obvious and easily determined. Possible causes of overpressurization include regulator and/or relief failure at purchase points, pressure reducing stations and/or meter settings. It may be necessary, however, to call for assistance with this step, if additional help has not already been summoned.
9.	***Verify that the situation will not become unstable and effect existing gas pressure conditions.***	Evaluate conditions for stability. If they appear to be unstable, and the instability may create a more hazardous situation, call for assistance if additional help has not already been summoned. Otherwise, take further actions to stabilize the situation only if it is known what the full effects of those actions will be. While it may be necessary for a wider area of the transmission or distribution system to be shut down, this is most likely a decision the Supervisor should be asked to make, whenever time and conditions permit.
10.	***Check affected area for leakage in buildings; over mains, services, manholes, and other openings. Also check other buildings in the vicinity.***	With appropriate equipment, survey the affected area over mains, services, manholes, and other openings Check inside buildings at the location of the emergency, and check other buildings in the vicinity. DO NOT use an FI unit inside a building.
11.	***Repair, shut off, or make safe any source of leaking gas.***	If leakage is detected and situation allows, repair, shut off, or make safe any source of leaking gas. Note time made safe and notify dispatch/supervision, otherwise await assistance from other personnel. Wear flash gear, if appropriate
12.	***Consult with fire, police, or other emergency personnel to determine cause and/or coordinate further response.***	Work with other on-scene emergency personnel to coordinate and conduct ongoing response activities, including crowd control if necessary. Refer media inquiries to supervision or designated media contact
13.	***If safe, conduct or assist with continuing response activities as the situation warrants.***	Depending on the situation, additional response activities may be warranted. Perform or assist with such activities if safe and appropriate to do so.
14.	***Complete or assist with completion of appropriate documentation.***	Gather initial information and complete, or assist in the completion of documentation as required by the situation possibly including, but not limited to: Work Tickets, Customer Listings, Outage Reports, Public Accident Report/Claim Notice, Report of Damage to Company Property/Plant, and the "Natural Gas Incident Report". Refer to the "Internal Incident Reporting Matrix" to determine reporting requirements. (Section 3.01 - Exhibit "B")



F – CUT LINE / RELEASE OF GAS

FOR SAFETY

1.	**INVESTIGATE** *existence and extent of emergency*	Determine that the emergency exists at the location dispatched. Also, determine how extensive or serious the emergency is with a preliminary investigation. Any reading obtained with a CGI inside a building is considered an emergency.
2.	**REMOVE** *persons from the scene including yourself if appropriate*	Be aware of the possibility that persons may need to be removed from the scene in the interest of safety. Use care to NOT activate any electrical device that could spark ignition. Remember that an unsafe or unstable situation may require that company personnel should stay away from the scene.
3.	**SEEK** *supervisory guidance and/or summon help from others when appropriate*	If the situation is serious enough, inform dispatching and seek guidance and/or assistance from supervision and other personnel. If preliminary information indicates the need for additional response personnel or equipment, consider informing supervision before arriving on the scene.
4.	**TURN OFF** *gas facilities if safe and appropriate*	If the situation warrants, and if safe to do so, turn off gas facilities to the area which is vulnerable or affected by the emergency. While it may be necessary for a wider area of the system to be shut down, this is most likely a decision the Supervisor should be asked to make, whenever time and conditions permit. CAUTION: DO NOT turn off gas facilities unless the effect of the turn-off is known.

THEN... τ

5.	***Consider blocking off area, rerouting public, etc. (keep onlookers away while the situation may be unsafe).***	Consider if it is advisable to block off the area or reroute public presence. Remember that natural gas may migrate below ground to another venting point. Ensure that anyone removed from the area stays away while the situation remains unsafe.
6.	***Eliminate ignition sources to the extent possible if gas is present in air.***	Attempt to determine the status of ignition sources in the area, and if safe and appropriate to do so, eliminate these source(s) if gas is present in the air. If it is necessary to contact other utilities such as electric, phone, or cable, make the call(s) from outside the gaseous environment.

7.	***Ventilate the atmosphere if safe and appropriate to do so.***	If gas is present in air, ventilate the atmosphere if safe and appropriate. This may include removing manhole covers, barholing, installing vent holes, opening windows and/or doors or other means. *If the detected concentration of gas in air is above or within the explosive range (4-15 percent of natural gas), DO NOT ventilate the atmosphere until all ignition sources have been eliminated.* Ventilating the atmosphere under such conditions will at some point bring the concentration into the flammable range. If the ignition sources are not removed prior to this, the environment could become explosive.
8.	***Verify that the situation will not become unstable and effect existing gas pressure conditions.***	Evaluate conditions for stability. If they appear to be unstable, and the instability may create a more hazardous situation, call for assistance if additional help has not already been summoned. Otherwise, take further actions to stabilize the situation only if it is known what the full effects of those actions will be. In the case of damaged underground facilities, this may involve a separate excavation outside of the gaseous atmosphere area, to facilitate flow restriction techniques. While it may be necessary for a wider area of the transmission or distribution system to be shut down, this is most likely a decision the Supervisor should be asked to make, whenever time and conditions permit.
9.	***Check affected area for leakage in buildings; over mains, services, manholes, and other openings. Also check other buildings in the vicinity.***	With appropriate equipment, survey the affected area over mains, services, manholes, and other openings. Pay particular attention to areas of recent excavation for signs of leakage. Check inside buildings at the location of the emergency, and check other buildings in the vicinity. Keep in mind the potential for multiple leaks in or near this area. Also an explosion in close proximity could effect gas facilities. DO NOT use an FI unit inside a building.
10.	***Repair, shut off, or make safe any source of leaking gas.***	If leakage is detected and situation allows, repair, shut off, or make safe any source of leaking gas. Note time made safe and notify dispatch/supervision, otherwise await assistance from other personnel. Wear flash gear, if appropriate
11.	***Consult with fire, police, or other emergency personnel to determine cause and/or coordinate further response.***	Work with other on-scene emergency personnel to coordinate and conduct ongoing response activities, including crowd control if necessary. Refer media inquiries to supervision, or designated media contact.
12.	***If safe, conduct or assist with continuing response activities as the situation warrants.***	Depending on the situation, additional response activities may be warranted. Perform or assist with such activities if safe and appropriate to do so.

Deleted: *at or*

Deleted: *15 percent*

Deleted: *the Upper Explosive Limit*

13.	***Complete or assist with completion of appropriate documentation.***	Gather initial information and complete, or assist in the completion of documentation as required by the situation possibly including, but not limited to: Work Tickets, Customer Listings, Outage Reports, Public Accident Report/Claim Notice, Report of Damage to Company Property/Plant, and the "Natural Gas Incident Report". Refer to the "Internal Incident Reporting Matrix" to determine reporting requirements. (see Section 3.01 - Exhibit "B")

[redacted]

WARNING *Use extreme caution and follow all appropriate Company safety practices.*

REFERENCES

DOT CFR Title 49, Part 192.615
—Emergency plans.
DOT CFR Title 49, Part 195.402(e)
—Emergency.

Action Plan

Exhibit # 10(c)

Action
Field Operations – Curb Box discovery
Identify and remediate curb boxes on inserted services
Review Applicable Standards & Procedures
Operation & Maintenance, Emergency Response
Determine who needs to review
Determine which S&P's apply
Suggest needed modifications – Immediate
Modify as appropriate
Suggest needed modifications – Prioritize
Note for future procedure development
Determine links needed to other procedures
Turn-on/Re-light Policy
Determine if CSP Group is proper group for review
Convey Need for review and development to CSP
Develop Vectren-wide Turn-on/Re-light Policy
Determine links needed to other procedures
Review Inspection Practices
Review documentation and auditing practices
Develop recommendations
Training/Communication
Determine if current method of training/communication is adequate
Determine needed face-to-face training for applicable S&P's
Develop training
Implement training
Determine needed "Alerts" for applicable S&P's and lessons learned
Develop "Alerts"
Distribute "Alerts"
OQ Issues
Determine applicable CT's
Review existing method of qualification on those CT's
Make modifications to CT modules to match S&P's
Determine if re-qualification on new material needs to occur
Convey changes to S&P's and CT's to proper individuals
Determine action to re-qualify employees on applicable CT's
Re-qualify if needed
Quality Assurance
Determine process to ensure modified standards & procedures and applicable training/qualification and communication is effective.
Implement quality assurance process
Develop list of recommended adjustments
Review recommended adjustments and propose appropriate changes.
Make changes
Convey changes to appropriate individuals

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

82001	IN	04/03/2004	116	0411186	00	NFIRS -1 Basic
FDID	State	Incident Date	Station	Incident Number	Exposure	

B Location

☐ See Wildland Fire Module for Location

Census Tract

1 Street address: 3307 (Number/Milepost) | Prefix | LINCOLN (Street or Highway) | AVE (Street Type) | Suffix

Apt./Suite/Room | EVANSVILLE (City) | IN (State) | 47715- (Zip Code)

VANN AV (Cross Street or Directions)

C Incident Type

111 Building fire
Incident Type

D Aid Given or Received

N None

E1 Dates & Times

	Date	Time
Dispatch	04/03/2004	11:19:59
☒ Arrival	04/03/2004	11:20:57
☐ Controlled		: :
☒ Last Unit Cleared	04/03/2004	19:28:12

E2 Shifts & Alarms
Local Option

3	1	32
Shift or platoon	Alarms	District

E3 Special Studies
Local Option

Special Study ID# | Special Study Value

F Action Taken

11 Extinguish
Primary Action Taken (1)

30 Emergency medical services, other
Additional Action Taken (2)

86 Investigate
Additional Action Taken (3)

G1 Resources

☐ Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	10	36
EMS	0	0
Other	10	10

☐ Check box if resource counts include aide received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

			None
Property	$	0	☒
Contents	$	0	☒

PRE-INCIDENT VALUE:

Property	$	0	☒
Contents	$	0	☒

Completed Modules

- ☒ Fire-2
- ☒ Structure-3
- ☒ Civilian Fire Cas.-4
- ☒ Fire Serv. Casualty-5
- ☐ EMS-6
- ☒ HazMat-7
- ☐ Wildland Fire-8
- ☒ Apparatus-9
- ☐ Personnel-10
- ☐ Arson-11

H1 Casualties ☐ None

	Deaths	Injuries
Fire Service	0	4
Civilian	2	5

H2 Detector

2 Detector did not alert occupants

H3 Hazardous Materials Release

0 Special hazmat actions required or spill > 55 gal.

I Mixed Use Property

NN Not mixed use

J Property Use

419 1 or 2 family dwelling

M Authorization

GMAIN (Officer in charge ID) _____ (Signature) DC (Rank) SUPRESSION (Assignment) 04/03/2004 (Date)

greg W main

Check box if same as Officer in charge ☐ JSTOREY (Member making report ID) _____ (Signature) (Rank) SUPRESSION (Assignment) 04/03/2004 (Date)

Jesse O Storey

Exhibit # 13

Incident: 0411186-00

K1 Person/Entity Involved

Local Option

Business name (if applicable) | Phone Number

☐ Check this box if same address as incident location. Then skip the three duplicate address lines.

MRS (Mr., Ms., Mrs.) | JOSIE (First Name) | MI | WILLIAMS (Last Name) | Suffix

3208 (Number) | N (Prefix) | 11TH (Street or Highway) | AVE (Street Type) | Suffix

Post Office Box | Apt./Suite/Room | Evansville (City)

IN (State) | 47720- (Zip Code)

K2 Owner

Local Option

☐ Same as person involved? Then check this box and skip the rest of this section.

Business name (if applicable) | Phone Number

☐ Check this box if same address as incident location. Then skip the three duplicate address lines.

MS (Mr., Ms., Mrs.) | DAISY (First Name) | P (MI) | HARDY (Last Name) | Suffix

3307 (Number) | Prefix | LINCOLN (Street or Highway) | AVE (Street Type) | Suffix

Post Office Box | Apt./Suite/Room | EVANSVILLE (City)

IN (State) | 47715- (Zip Code)

L Remarks:

Local Option

INVESTIGATIVE REPORT
FIRE CAUSE DETERMINATION: ACCIDENTAL
INVESTIGATOR: JESSE STOREY C.F.I. # 14-017

THIS INCIDENT WAS REPORTED TO 9-1-1 BY MULTIPLE CALLERS REPORTING THAT A HOUSE HAD EXPLODED. SEVERAL OF THE CALLERS REPORTED THAT VECTREN WAS ON THE SCENE WORKING AT THE TIME OF THE EXPLOSION. DUE TO REPORTED CIVILIAN INJURIES, A.M.R. WAS NOTIFIED OF POSSIBLE MASS CASUALTIES.
1A32 (DISTRICT CHIEF GREG MAIN ARRIVED ON THE SCENE AND INITIATED THE ICS (INCIDENT COMMAND SYSTEM). DISTRICT CHIEF MAIN'S REPORT AS WELL AS COMPANY OFFICER REPORTS WILL BE MADE ATTACHMENTS TO THIS REPORT.

K

82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change	NFIRS - 1S Supplemental
FDID	State	Incident Date	Station	Incident Number	Exposure		

K3 Person/Entity Involved

VECTREN
Business name if applicable — Phone Number

☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

MR	MARK		REXING	
Mr., Ms., Mrs.	First Name	MI	Last Name	Suffix

4700		KOESTER		RD	
Number	Prefix	Street of highway		Street Type	Suffix

		Evansville
Post office box	Apt./Suite/Room	City

IN	47720-
State	Zip Code

L 2 Remarks:
Local Option

THIS INVESTIGATOR WAS CONTACTED BY CHIEF OF FIRE INVESTIGATIONS, LARRY CHAPMAN. CHIEF CHAPMAN ADVISED THAT THIS INCIDENT INVOLVED AN EXPLOSION WITH MULTIPLE CIVILIAN INJURIES.
WHEN I ARRIVED ON THE SCENE I MET WITH IC, (DISTRICT CHIEF MAIN) AND 1A63 WHO HAD ASSUMED THE CAPACITY OF SCENE SAFETY OFFICER.
I WAS ADVISED THAT A VECTREN EMPLOYEE HAD BEEN ASSISTED OUT OF THE DEBRIS OF THE BASEMENT AREA WITH SEVERE BURNS AND HAD BEEN TRANSPORTED TO ST. MARY'S E.R. I RECEIVED MULTIPLE ACCOUNTS ON THE EXTRICATION OF THE VECTREN EMPLOYEE INCLUDING ASSISTANCE GIVEN BY A CIVILIAN IDENTIFIED AS DAVE ELLINGTON AND INFORMATION RECEIVED FROM OFF DUTY FIREFIGHTER KEITH OTZMAN THAT THE MAN HAD CRAWLED OUT OF THE DEBRIS BY HIMSELF. I WAS ALSO ADVISED THAT A FEMALE SUBJECT WAS LOCATED AT THE REAR OF THE HOME AND WAS EXTRICATED BY AN E.P.D. OFFICER ASSISTED BY OFF DUTY FIREFIGHTER LT. JIM MASTISON. THE FEMALE VICTIM WAS THEN TREATED BY LT. MASTISON, OFF DUTY FIREFIGHTER KEITH OTZMAN AND MEDICS FROM A.M.R. THIS VICTIM HAD BURN INJURIES AS WELL AS MULTIPLE FRACTURES CAUSED BY IMPACT OF DEBRIS DURING THE EXPLOSION. INSTRUCTOR RICK WHITEHOUSE ARRIVED ON THE SCENE AND ASSUMED THE ROLE OF LIAISON BETWEEN INCIDENT COMMAND AND A.M.R. INSTRUCTOR WHITEHOUSE'S REPORT OF ACTIVITIES WILL BE AN ATTACHMENT TO THIS REPORT.
I WAS BRIEFED THAT THE EVANSVILLE WATER DEPARTMENT HAD BEEN IN THE PROCESS OF REPLACING A WATER METER AT 3307 LINCOLN AVE. AND HAD SEVERED A NATURAL GAS LINE. I WAS ADVISED THAT THIS LEAK EVENT OCCURRED AT ABOUT 0745 HRS. AND WAS IMMEDIATELY REPORTED TO VECTREN GAS SERVICES.
AT THAT TIME I MET WITH EVANSVILLE POLICE DETECTIVE LARRY NELSON AND ADVISED HIM THAT WE SHOULD GO TO ST MARY'S E.R. TO ATTEMPT TO GET VICTIM STATEMENTS AS SOON AS POSSIBLE DUE TO THE SEVERITY OF THE VICTIMS INJURIES AND THE PROBABILITY THAT THEY WOULD BE TRANSFERRED OUT OF TOWN FOR TREATMENT.
DETECTIVE NELSON AND I WENT TO THE E.R. AND WENT THE TREATMENT ROOM OF MARK REXING (VECTREN EMPLOYEE). I ASKED MR REXING IF HE KNEW WHAT HAD HAPPENED. HE THEN REPLIED THAT HE HAD GONE TO THE BASEMENT (OF 3307 LINCOLN AVE.) TO RE-LIGHT THE PILOT OF THE WATER HEATER. HE FURTHER STATED THAT HE DID NOT SMELL NATURAL GAS WHILE INSIDE THE HOME. HE STATED THAT AS HE STRUCK THE MATCH THE EXPLOSION OCCURRED.
DETECTIVE NELSON AND I ATTEMPTED TO INTERVIEW THE FEMALE VICTIM BUT WAS ADVISED THAT HER CONDITION WAS CRITICAL. THERE WERE ABOUT 8 OR 9 PEOPLE STANDING AROUND THE VICTIM INCLUDING A CLERGYMAN. AT THIS POINT WE BELIEVED THIS WOMAN TO BE MS. DAISY HARDY, THE OWNER OCCUPANT OF THE RESIDENCE AT 3307 LINCOLN.
DETECTIVE NELSON WAS THE ALERTED TO A WOMAN OUTSIDE THE EMERGENCY AREA WHO ADVISED HIM THAT SHE BELIEVED THAT HER MOTHER, MRS. JOSIE WILLIAMS WAS ALSO PRESENT AT THE 3307 LOCATION AT THE TIME OF THE EXPLOSION EXPLAINING THAT MRS. WILLIAMS WENT TO MS. HARDY'S HOME EVERY SATURDAY. HAVING THIS INFORMATION DETECTIVE NELSON AND I RETURNED TO THE SCENE AND ADVISED INCIDENT COMMAND THAT THERE MAY BE A THIRD VICTIM STILL IN THE DEBRIS PILE. DETECTIVE NELSON IDENTIFIED THE PASSENGER VEHICLE IN THE DRIVEWAY, RAN THE PLATE NUMBER AND

MEMBERS OF MRS. WILLIAMS WHO WERE STANDING BY ACROSS THE STREET WERE ADVISED BY DETECTIVE NELSON THAT THE FEMALE VICTIM AT THE HOSPITAL WAS BELIEVED TO BE MS. HARDY, BUT A POSITIVE IDENTIFICATION HAD NOT BEEN MADE. DETECTIVE NELSON REQUESTED THE DAUGHTER OF MRS. WILLIAMS GO TO ST. MARY'S WITH AN E.P.D. OFFICER TO ATTEMPT AN I.D. WE WERE LATER ADVISED THAT BASED ON A MOLE AND A PIECE OF JEWELRY THAT THE VICTIM AT ST. MARY'S WAS JOSIE WILLIAMS. AFTER CONFIRMING THAT A THIRD VICTIM WAS IN THE STRUCTURAL DEBRIS AND ASSESSING THE STRUCTURAL STABILITY I.C. CALLED FOR HEAVY EQUIPMENT TO BE BROUGHT TO THE SCENE TO AID FIREFIGHTERS IN THE SEARCH AND RECOVERY OF THE THIRD VICTIM. UPON THE REQUEST OF E.P.D. OFFICIALS, A CADAVER SEARCH DOG WAS ALLOWED TO SNIFF THE SCENE IN AN ATTEMPT TO LOCATE THE VICTIM. THE K-9 ALERTED INSIDE THE BASEMENT AREA ALONG THE EAST SIDE OF THE STRUCTURE AND STAUB EXCAVATING WAS DIRECTED WHERE TO REMOVE DEBRIS. AT 1627 HRS. THE BODY WAS DISCOVERED AND REMOVED FROM THE DEBRIS AND THE CORONER WAS REQUESTED TO THE SCENE.

INFORMATION REGARDING THE CAUSATION:
AT ABOUT 0745 HRS A CREW FROM THE EVANSVILLE WATER DEPARTMENT WAS ATTEMPTING TO REPLACE A WATER METER AT 3307 LINCOLN AVE. MARKING WERE PRESENT IDENTIFYING BURIED UTILITY LINES. THE WATER LINE AND NATURAL GAS SERVICE LINE RAN PARALLEL ABOUT 2 FEET APART FROM EACH OTHER RUNNING FROM THE STREET TO THE STRUCTURE. THE WATER DEPARTMENT EMPLOYEES FOUND A LID FOR A "STOP BOX" (A CAST TUBULAR UNIT THAT WENT FROM NEAR GROUND LEVEL TO THE SHUT OFF VALVE) COVERED BY A COUPLE INCHES OF EARTH. USING A "KEY" (FORKED END PIPE DEVICE WITH A HANDLE) THE CREW TURNED THE VALVE TO STOP THE FLOW OF WATER AND QUICKLY LEARNED THAT THEY HAD TURNED A VALVE FOR THE NATURAL GAS AND NOT THE WATER. THE CREW, REALIZING THAT THE ODOR OF NATURAL GAS WAS PRESENT AND THAT THE WATER METER WAS STILL OPERATING, KNEW A NATURAL GAS LEAK WAS PRESENT. THE WATER CREW THEN CALLED VECTREN DIRECT AND NOTIFIED THEM OF THE LEAK. THE NEXT VERIFIABLE MARK ON THE TIME LINE IS 0939 HRS. WHERE THE WATER DEPARTMENT IS CALLED BY VECTREN TO HAVE A CREW RETURN TO THE SCENE AND RE-LOCATE THE WATER LINE PRIOR TO VECTREN EXCAVATING THE BROKEN NATURAL GAS LINE. THE LAST KNOWN VERIFIABLE TIME IS 1119 HRS WHEN CENTRAL DISPATCH (9-1-1) RECEIVES THE REPORT OF THE EXPLOSION.

DURING THE EMERGENCY OPERATIONS AT THE SCENE I MET WITH MR RICK SLAGLE, MANAGER, ENGINEERING SERVICES FOR VECTREN AND ADVISED HIM THAT I WANTED TO TAKE THE GAS SHUT OFF VALVE AND ANY ASSOCIATED PLASTIC TUBING FROM THE LEAK SITE AND PLACE IT IN OUR CUSTODY. THE EVIDENCE WAS COLLECTED, TAGGED AND PHOTOGRAPHED BY E.P.D. CRIME SCENE OFFICERS ASSISTING THIS INVESTIGATOR AND PLACED IN THEIR CUSTODY. I WENT TO THE CRIME SCENE OFFICE ON 04/13/04 AND TOOK CUSTODY OF THE EVIDENCE AND PLACED IT IN THE FIRE DEPARTMENT EVIDENCE LOCK-UP UNTIL REMOVING IT FOR DISPLAY TO THE CIVIL PARTIES AT THE FIRE ADMINISTRATION BUILDING ON 04/15/04. THIS MEETING WAS COORDINATED BY THIS INVESTIGATOR AND MR. MIKE REYNOLDS OF UNIFIED INVESTIGATIONS AND SCIENCES REPRESENTING STATE FARM INSURANCE INSURANCE CO FOR THE PROPERTY AT 3307 LINCOLN AVE. THE PARTIES WERE REQUIRED TO SIGN IN FOR ATTENDANCE AND WERE ALLOWED TO PHOTOGRAPH THE ITEMS. NO DESTRUCTIVE TESTING OR MANIPULATIONS WERE ALLOWED. THE EVIDENCE WAS THEN RETURNED TO FIRE DEPARTMENT LOCK-UP.
A SCENE EXAMINATION FOR THE INVOLVED PARTIES WAS SET FOR 04/16 04 @0900 HRS. AND AGAIN COORDINATED BY THIS INVESTIGATOR AND MIKE REYNOLDS. GAS PIPING WAS EXAMINED AS WELL AS DEBRIS INSIDE AND OUTSIDE OF THE STRUCTURE. AN EXCAVATION WAS DONE ALONG THE NORTH WALL FROM THE SURFACE TO THE DRAIN TILE AREA TO DETERMINE POSSIBILITIES OF ROUTES OF MIGRATION OF THE NATURAL GAS FROM THE TERMINATION POINT OF THE 1 1/4 PIPE TO THE INTERIOR OF THE STRUCTURE. EACH AGENCY REPRESENTED AT THE SCENE WAS ALLOWED TIME TO EXAMINE ANY PORTION OF THE STRUCTURE OR ITS CONTENTS AND ALLOWED TO PHOTOGRAPH OR VIDEO THE ENTIRE SCENE.

INFORMATION ON NATURAL GAS SERVICE LINE:
THIS WAS AN UPGRADED SERVICE LINE CONVERTED FROM LOW PRESSURE (15 P.S.I.) TO HIGH PRESSURE (55P.S.I.) DURING THIS CONVERSION A SMALL DIAMETER PLASTIC TUBING WAS RAN FROM THE GAS MAIN SUPPLY. THE TUBING WAS INSERTED THROUGH THE EXISTING 1 1/4 STEEL PIPING AND EXTENDED TOWARD THE RESIDENCE TO A POINT OF ABOUT 2 FEET FROM THE FOUNDATION, BASEMENT WALL. AT THIS 2 FOOT MARK, THE EXISTING 1 1/4

WHEN THE WATER DEPARTMENT CREW LOCATED THE "STOP BOX" WITH THE CAST LID COVERED WITH HARDENED DIRT, THEY MADE AN ASSUMPTION BASED ON THE LOCATE MARKS AND THE LOCATION OF THE "WATER METER PIT" THAT THEY HAD FOUND THE WATER SHUT OFF.

INDUSTRY ISSUES IDENTIFIED:

1. THE SHUT OFF VALVE ON THE ORIGINAL 1 1/4 GAS LINE SHOULD HAVE BEEN REMOVED TO ELIMINATE ANY POSSIBILITY THAT IT'S POSITION WOULD BE ALTERED. ANY MOVEMENT IN THIS VALVE WOULD CAUSE THE INSERTED TUBING TO BE FRACTURED, RESULTING IN GAS FLOW.

2. THE "STOP BOX" SHOULD HAVE BEEN REMOVED DURING THE CONVERSION. THIS REMOVAL WOULD HAVE MADE THE VALVE LOCATION IMPOSSIBLE WITHOUT EXCAVATION AND ELIMINATED MISIDENTIFICATION OF SERVICES.

3. THE LIKENESS BETWEEN THE SHUT OFF VALVES OF BOTH THE NATURAL GAS SERVICE AND THE WATER SUPPLY AID IN THE MISIDENTIFICATION OF SERVICES. IF THE VALVES REQUIRED A DIFFERENT DESIGN OF TOOL TO MANIPULATE, ONE SERVICE COULD NOT OPERATE THE VALVES OF THE OTHER.

CONCLUSION:
A SERIES OF EVENTS OCCURRED THAT ULTIMATELY LED TO THIS EXPLOSION.

1. A SHUT OFF "STOP BOX" WAS MISIDENTIFIED BY WATER DEPARTMENT EMPLOYEES.

2. A SHUT OFF VALVE WAS TURNED BY WATER DEPARTMENT EMPLOYEES CAUSING THE PLASTIC GAS SUPPLY TUBING TO FRACTURE.

3. THE EXISTING 1 1/4 STEEL PIPE PROVIDED AN UNOBSTRUCTED CHANNEL FOR GAS TO FLOW TO A DISTANCE 2 FEET IN FRONT OF THE STRUCTURE @ 3307 LINCOLN AVE.

4. THE GAS REPAIRMAN LIKELY SUFFERS OLFACTORY FATIGUE FROM EXPOSURE TO EXCESSIVE QUANTITY OF NATURAL GAS.

5. ODORIZING AGENT IS DILUTED INTO SOIL AND MASONARY SURFACE OF BASEMENT WALL PRIOR TO ENTERING THE STRUCTURE.

6. PERCENTAGE OF NATURAL GAS THAT MIGRATED INSIDE THE STRUCTURE REACHED EXPLOSIVE RANGE.

7. VECTREN REPAIRMEN ENTERS THE RESIDENCE AND DOES NOT DETECT ODOR OF NATURAL GAS BY SENSE OF SMELL.

8. VECTREN REPAIRMAN FAILS TO ELECTRONICALLY MONITOR THE ATMOSPHERE INSIDE THE STRUCTURE FOR THE PRESENCE OF NATURAL GAS.

9. VECTREN REPAIRMAN STRIKES A MATCH IN ATTEMPT TO RE-LIGHT PILOT ON WATER HEATER AND NATURAL GAS IGNITES CAUSING EXPLOSION.

Time/Date: 12:40 on 04/24/2004 by Jesse O Storey JSTOREY JSTOREY

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

82001	IN	04/03/2004	116	0411186	00	NFIRS - 2 Fire
FDID	State	Incident Date	Station	Incident Number	Exposure	

B Property Details

B1 4.00 ☐ Not Residential
Estimated number or residential living units in building of origin whether or not all units became involved

B2 6.00 ☐ Buildings not involved
Number of buildings involved

B3 Acres burned (outside fires) ☒ None ☐ Less than one acre

C On-Site Materials or Products ☐ None

200 Personal & home products, other N ☒ None
On-site material (1)

On-site material (2)

On-site material (3)

D Ignition

D1 62 Heating room or area, water heater area
Area of fire origin

D2 64 Match
Heat source

D3 65 Flammable liquid/gas - uncontained
Item first ignited 1 ☐ Check box if fire spread was confined to object of origin

D4 11 Natural gas
Type of material first ignited Required only if item first ignited code is 00 or <70

E1 Cause of Ignition

☐ Check box if this is an exposure report.
2 ☒ Unintentional

E2 Factors Contributing to Ignition ☐ None

23 Leak or break
Factor contributing to ingnition (1)

Factor contributing to ingnition (2)

E3 Human Factors Contributing to Ignition

1 ☐ Asleep
2 ☐ Possibly impaired by alcohol or drugs
3 ☐ Unattended person
4 ☐ Possibly mentally disabled
5 ☐ Physically disabled
6 ☐ Multiple persons involved

7 ☐ Age was a factor

Estimated age of person involved

1 ☐ Male 2 ☐ Female

F1 Equipment Involved in Ignition

☒ None If equipment was not involved, skip to Section G

Equipment Involved

Brand

Model

Serial #

Year

F2 Equipment Power

Equipment Power Source

F3 Equipment Portability

☐

Portable equipment normally can be moved by one person, is designed to be used in multiple locations, and requires no tools to install.

G Fire Suppression Factors

Enter up to three codes. ☐ None

131 Wall collapse
Fire suppression factor (1)

315 Significant fuel load from man-made
Fire suppression factor (2)

Fire suppression factor (3)

H1 Mobile Property Involved

☒ None

H2 Mobile Property Type & Make

Mobile propoerty type

Mobile property make

Mobile propoerty model Year

License Plate Number State VIN Number

Local Use

☐ Pre-Fire Plan Available

Some of the information presented in this report may b based upon reports from other agencies:

☐ Arson report attached
☐ Police report attached
☐ Coroner report attached
☐ Other reports attached

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

NFIRS - 3 Structure Fire

I1 Structure Type
If fire was in an enclosed building or a portable/mobile structure complete the rest of this form
1 [X] Enclosed building

I2 Building Status
2 [X] Occupied and operating

I3 Building Height
Do not count the ROOF as a story
1 Total number of stories at or above grade
1 Total number of stories below grade

I4 Main Floor Size
1,272 Total square feet
OR
BY
Length in feet Width in feet

J1 Fire Origin
1 Story of fire origin [X] Below grade

J2 Fire Spread
5 [X] Beyond building of origin

J3 Number of Stories Damaged By Flame
Count the ROOF as part of the highest story
Number of stories w/ minor damage (1 to 24% flame damage)
Number of stories w/ minor damage (25 to 49% flame damage)
Number of stories w/ minor damage (50 to 74% flame damage)
2 Number of stories w/ minor damage (75 to 100% flame damage)

K Material Contributing Most To Flame Spread
[ ] Check if no flame spread OR same as material first ignited OR unable to determine

K1 65 Flammable liquid/gas - uncontained
Item contributing most to flame spread

K2 11 Natural gas
Type of material contributing most to flame spread

L1 Presence of Detectors
(in area of the fire)
U [X] Undetermined

L2 Detector Type
[ ]

L3 Detector Power Supply
[ ]

L4 Detector Operation
[ ]

L5 Detector Effectiveness
Required if dector operated.
[ ]

L6 Detector Effectiveness
Required if dector failed to operate.
[ ]

M1 Presence of Automatic Extinguishment System
N [X] None Present

M2 Type of Automatic Extinguishment System
Required if fire was within designated range of AES
[ ]

M3 Automatic Extinguishment System Failure Reason
[ ]

M4 Number of Sprinkler Heads
Required if system operated
Number of sprinkler heads operating

M5 Automatic Extinguishment System Failure Reason
Required if system failes
[ ]

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

FDID	State	Incident Date	Station	Incident Number	Exposure		NFIRS - 4 Civilian Fire Casualty
82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change	

B Injured Person

First Name	MI	Last Name	Suffix
DAISY		HARDIN	

C Casualty Number

Casualty Number:

D Age or Date of Birth

89 Age ☐ Months (for infants)

OR

Date of Birth: 04/21/1914

E1 Race

1 [X] White

E2 Ethnicity

☐

F Affiliation

1 [X] Civilian

G Date & Time of Injury Midnight is 0000

Date of Injury: 04/03/2004 Time of Injury: 11:19

H Severity

5 [X] Death

I Cause of Injury

9 [X] Multiple causes

J Human Factors Contributing to Injury

☐ None

Check all applicable boxes

1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 [X] Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury

☐ None Enter up to three contributing factors

43 Floor collapse
Contributing factor (1)

20 Fire pattern, other
Contributing factor (2)

Contributing factor (3)

L Activity When Injured

7 [X] Unable to act

M1 Location at Time of Incident

1 [X] In area of origin & not involved

M2 General Location at Time of Injury

Check ONE box. If undetermined, leave blank and skip to Section N.

1 [X] In area of origin

M3 Story at Start of Incident

Complete ONLY if injury occurred INSIDE

Story at START of incident ☐ below grade

M4 Story Where Injury Occurred

Story where injury occurred, if different from M3 ☐ below grade

M5 Specific Location at Time of Injury

Complete ONLY if casualty NOT in area of origin

Specific location at time of injury

N Primary Apparent Symptom

0 [X] Smoke inhalation

O Primary Area of Body Injured

8 [X] Internal

P Disposition

☐ Transported to emergency care facility

Remarks Local option

HOMEOWNER, DEAD ON SCENE

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change	NFIRS - 4 Civilian Fire Casualty
FDID	State	Incident Date	Station	Incident Number	Exposure		

B Injured Person

JOSIE (First Name) | (MI) | WILLIAMS (Last Name) | (Suffix)

C Casualty Number

(Casualty Number)

D Age or Date of Birth

65 Age ☐ Months (for infants)

OR

Date of Birth: 10/04/1937

E1 Race

1 [X] White

E2 Ethnicity

☐

F Affiliation

1 [X] Civilian

G Date & Time of Injury Midnight is 0000

Date of Injury: 04/03/2004 Time of Injury: 11:19

H Severity

5 [X] Death

I Cause of Injury

9 [X] Multiple causes

J Human Factors Contributing to Injury

☐ None

Check all applicable boxes

1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury

☐ None Enter up to three contributing factors

10 Egress problem, other
Contributing factor (1)

00 Other factor contributed to
Contributing factor (2)

Contributing factor (3)

L Activity When Injured

7 [X] Unable to act

M1 Location at Time of Incident

2 [X] Not in area & not involved

M2 General Location at Time of Injury

Check ONE box. If undetermined, leave blank and skip to Section N.

1 [X] In area of origin

M3 Story at Start of Incident

Complete ONLY if injury occurred INSIDE

Story at START of incident ☐ below grade

M4 Story Where Injury Occurred

Story where injury occurred, if different from M3 ☐ below grade

M5 Specific Location at Time of Injury

Complete ONLY if casualty NOT in area of origin

Specific location at time of injury

N Primary Apparent Symptom

1 [X] Burns and smoke inhalation

O Primary Area of Body Injured

9 [X] Multiple body parts

P Disposition

[X] Transported to emergency care facility

Remarks Local option

LADY WAS FOUND UNDER CAR PORT DEBRIS AND TRANSPORTED TO ST.MARY'S. ALS, DIED AT VANDERBILT TENN. 04/04/2004

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change	NFIRS - 4 Civilian Fire Casualty
FDID	State	Incident Date	Station	Incident Number	Exposure		

B Injured Person

MARK (First Name) | (MI) | REXING (Last Name) | (Suffix)

C Casualty Number

(Casualty Number)

D Age or Date of Birth

31 (Age) ☐ Months (for infants)

OR

Date of Birth: 09/19/1972

E1 Race

1 [X] White

E2 Ethnicity

☐

F Affiliation

1 [X] Civilian

G Date & Time of Injury Midnight is 0000

Date of Injury: 04/03/2004 Time of Injury: 11:19

H Severity

3 [X] Severe

I Cause of Injury

1 [X] Exposed to fire products

J Human Factors Contributing to Injury

[X] None

Check all applicable boxes

1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury

☐ None Enter up to three contributing factors

43 Floor collapse
Contributing factor (1)

00 Other factor contributed to
Contributing factor (2)

Contributing factor (3)

L Activity When Injured

7 [X] Unable to act

M1 Location at Time of Incident

4 [X] In area of origin and involved

M2 General Location at Time of Injury

Check ONE box. If undetermined, leave blank and skip to Section N.

1 [X] In area of origin

M3 Story at Start of Incident

Complete ONLY if injury occurred INSIDE

Story at START of incident ☐ below grade

M4 Story Where Injury Occurred

Story where injury occurred, if different from M3 ☐ below grade

M5 Specific Location at Time of Injury

Complete ONLY if casualty NOT in area of origin

Specific location at time of injury

N Primary Apparent Symptom

1 [X] Burns and smoke inhalation

O Primary Area of Body Injured

9 [X] Multiple body parts

P Disposition

[X] Transported to emergency care facility

Remarks Local option

LIFE FLIGHT TO INDIANAPOLIS, VECTREN EMPLOYEE

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

FDID	State	Incident Date	Station	Incident Number	Exposure		
82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change	NFIRS - 4 Civilian Fire Casualty

B Injured Person

First Name	MI	Last Name	Suffix
MARVIN		MAXBERRY	

C Casualty Number

Casualty Number:

D Age or Date of Birth

Age: 80 ☐ Months (for infants)

OR

Date of Birth:

E1 Race

1 ☒ White

E2 Ethnicity

☐

F Affiliation

1 ☒ Civilian

G Date & Time of Injury Midnight is 0000

Date of Injury: 04/03/2004

Time of Injury: 11:19

H Severity

2 ☒ Moderate

I Cause of Injury

1 ☒ Exposed to fire products

J Human Factors Contributing to Injury

☐ None

Check all applicable boxes

1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☒ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury

☐ None Enter up to three contributing factors

22 Exits blocked by smoke
Contributing factor (1)

Contributing factor (2)

Contributing factor (3)

L Activity When Injured

7 ☒ Unable to act

M1 Location at Time of Incident

2 ☒ Not in area & not involved

M2 General Location at Time of Injury

Check ONE box. If undetermined, leave blank and skip to Section N.

3 ☒ Outside, not in area of origin

M3 Story at Start of Incident

Complete ONLY if injury occurred INSIDE

Story at START of incident ☐ below grade

M4 Story Where Injury Occurred

Story where injury occurred, if different from M3 ☐ below grade

M5 Specific Location at Time of Injury

Complete ONLY if casualty NOT in area of origin

00 Other
Specific location at time of injury

N Primary Apparent Symptom

0 ☒ Smoke inhalation

O Primary Area of Body Injured

8 ☒ Internal

P Disposition

☐ Transported to emergency care facility

Remarks Local option

EXPOSURE AT 3303 LINCOLN, TREATED ON SCENE, REFUSED TRANSPORT

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change	NFIRS - 4 Civilian Fire Casualty
FDID	State	Incident Date	Station	Incident Number	Exposure		

B Injured Person

VIRGINIA (First Name) MI MAXBERRY (Last Name) Suffix

C Casualty Number

Casualty Number

D Age or Date of Birth

80 Age ☐ Months (for infants)

OR

Date of Birth

E 1 Race

1 [X] White

E 2 Ethnicity

☐

F Affiliation

1 [X] Civilian

G Date & Time of Injury Midnight is 0000

Date of Injury: 04/03/2004 Time of Injury: 11:19

H Severity

2 [X] Moderate

I Cause of Injury

1 [X] Exposed to fire products

J Human Factors Contributing to Injury

[X] None

Check all applicable boxes

1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury

[X] None Enter up to three contributing factors

Contributing factor (1)

Contributing factor (2)

Contributing factor (3)

L Activity When Injured

7 [X] Unable to act

M 1 Location at Time of Incident

2 [X] Not in area & not involved

M 2 General Location at Time of Injury

Check ONE box. If undetermined, leave blank and skip to Section N.

U [X] Undetermined

M 3 Story at Start of Incident

Complete ONLY if injury occurred INSIDE

Story at START of incident ☐ below grade

M 4 Story Where Injury Occurred

Story where injury occurred, if different from M4 ☐ below grade

M 5 Specific Location at Time of Injury

Complete ONLY if casualty NOT in area of origin

Specific location at time of injury

N Primary Apparent Symptom

0 [X] Smoke inhalation

O Primary Area of Body Injured

8 [X] Internal

P Disposition

☐ Transported to emergency care facility

Remarks Local option

FEMALE OCCUPANT OF 3303 LINCOLN, TREATED ON SCENE, REFUSED TRANSPORT

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change	NFIRS - 4 Civilian Fire Casualty
FDID	State	Incident Date	Station	Incident Number	Exposure		

B Injured Person

DAVE (First Name) | (MI) | ELLINGTON (Last Name) | (Suffix)

C Casualty Number

(Casualty Number)

D Age or Date of Birth

35 (Age) ☐ Months (for infants)

OR

(Date of Birth)

E1 Race

1 [X] White

E2 Ethnicity

☐

F Affiliation

1 [X] Civilian

G Date & Time of Injury Midnight is 0000

Date of Injury: 04/03/2004 Time of Injury: 11:22

H Severity

2 [X] Moderate

I Cause of Injury

9 [X] Multiple causes

J Human Factors Contributing to Injury

[X] None

Check all applicable boxes

1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury

[X] None Enter up to three contributing factors

Contributing factor (1)

Contributing factor (2)

Contributing factor (3)

L Activity When Injured

2 [X] Rescue attempt

M1 Location at Time of Incident

2 [X] Not in area & not involved

M2 General Location at Time of Injury

Check ONE box. If undetermined, leave blank and skip to Section N.

1 [X] In area of origin

M3 Story at Start of Incident

Complete ONLY if injury occurred INSIDE

Story at START of incident ☐ below grade

M4 Story Where Injury Occurred

Story where injury occurred, if different from M4 ☐ below grade

M5 Specific Location at Time of Injury

Complete ONLY if casualty NOT in area of origin

Specific location at time of injury

N Primary Apparent Symptom

0 [X] Smoke inhalation

O Primary Area of Body Injured

8 [X] Internal

P Disposition

[X] Transported to emergency care facility

Remarks Local option

SMOKE INHALATION AND NAIL PUNCTURE TO THE FOOT.

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change	NFIRS - 4 Civilian Fire Casualty
FDID	State	Incident Date	Station	Incident Number	Exposure		

B Injured Person

CHRIS (First Name) | MI | SCHAEFFER (Last Name) | Suffix

C Casualty Number

Casualty Number

D Age or Date of Birth

25 Age ☐ Months (for infants)

OR

Date of Birth

E1 Race

1 [X] White

E2 Ethnicity

☐

F Affiliation

1 [X] Civilian

G Date & Time of Injury Midnight is 0000

Date of Injury: 04/03/2004

Time of Injury: 11:25

H Severity

2 [X] Moderate

I Cause of Injury

1 [X] Exposed to fire products

J Human Factors Contributing to Injury

[X] None

Check all applicable boxes

1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury

[X] None Enter up to three contributing factors

Contributing factor (1)

Contributing factor (2)

Contributing factor (3)

L Activity When Injured

2 [X] Rescue attempt

M1 Location at Time of Incident

2 [X] Not in area & not involved

M2 General Location at Time of Injury

Check ONE box. If undetermined, leave blank and skip to Section N.

3 [X] Outside, not in area of origin

M3 Story at Start of Incident

Complete ONLY if injury occurred INSIDE

Story at START of incident ☐ below grade

M4 Story Where Injury Occurred

Story where injury occurred, if different from M3 ☐ below grade

M5 Specific Location at Time of Injury

Complete ONLY if casualty NOT in area of origin

93 Courtyard, patio, porch, terrace

Specific location at time of injury

N Primary Apparent Symptom

1 [X] Burns only: thermal

O Primary Area of Body Injured

1 [X] Head

P Disposition

☐ Transported to emergency care facility

Remarks Local option

TREATED ON SCENE BY FF BILL HESS, REFUSED TRANSPORT. PULLED JOSIE WILLIAMS FROM DEBRIS, BURNS TO THE FACE AND HANDS.

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

82001	IN	04/03/2004	116	0411186	00	☐ Delete	NFIRS - 7 HazMat
FDID	State	Incident Date	Station	Incident Number	Exposure Haz No	☐ Change	

B HazMat ID 0 — UN Number; 21 — DOT Hazard Classification; CAS Registration Number; Chemical Name: Natural gas

C1 Container Type
00 Container type, other

C2 Estimated Container Capacity
Capacity: by volume or weight

C3 Units: Capacity
15 [X] Cubic feet

D1 Estimated Amount Released
99,999
Amount released: by volume or weight

D2 Units: Released
15 [X] Cubic feet

E1 Physical State When Released
3 [X] Gas

E2 Released Into
Air and ground
5 [X]

Complete the remainder of this form only for the first hazardous material involved in this incident.

F1 Released From:
Check all applicable boxes
☐ below grade
☐ Inside/on structure
Story of release
[X] Outside of structure

F2 Population Density
1 [X] Urban Center -

G1 Area Affected
☐
Enter measurement

G2 Area Evacuated ☐ None
☐
Enter Measurement

G3 Estimated Number of People Evacuated ☐ None

G3 Estimated Number of Buildings Evacuated ☐ None

H HazMat Actions Taken
Enter up to three actions
32 Notify other agencies
Primary Action Taken (1)
34 Investigate
Additional Action Taken (2)
14 Hazmat leak control and containment
Additional Action Taken (3)

I If fire or explosion is involved with a release, which occurred first?
2 [X] Release

J Cause of Release
2 [X] Unintentional release

K Factors Contributing to Release
Enter up to three contributing factors
54 Other part failure, leak, or break
Factor Contributing To Release (1)
Factor Contributing To Release (2)
Factor Contributing To Release (3)

L Factors Affecting Mitigation
Enter up to three factors or impediments that affected the mitigation of the incident
Factor or impediment (1)
Factor or impediment (1)
Factor or impediment (1)

M Equipment Involved In Release ☐ None
000 Other equipment involved in ignition
Equipment involved in release
Brand
Model
Serial Number
Year

N Mobile Property Involved In Release [X] None
Mobile property type
Mobile property make
Model Year
License Plate Number State
DOT Number/ICC Number

O HazMat Disposition
2 [X] Completed with fire service present

P HazMat Civilian Casualties
Deaths Injuries

A

82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change
FDID	State	Incident Date	Station	Incident Number	Exposure	

NFIRS - 9 Apparatus or Resources

B	Apparatus or Resource (Use codes listed below)	Dates and Times (Check if same date as alarm date)	Sent ☐	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1	ID 1A1 Type 92	Dispatch [X] 04/03/2004 1400 Arrival [X] 04/03/2004 1400 Clear [X] 04/03/2004 1927	☐	1	[X] Other	
2	ID 1A20 Type 92	Dispatch [X] 04/03/2004 1212 Arrival [X] 04/03/2004 1212 Clear [X] 04/03/2004 1928	☐	1	[X] Other	
3	ID 1A32 Type 92	Dispatch [X] 04/03/2004 1119 Arrival [ ] Clear [X] 04/03/2004 1711	☐	1	[X] Other	
4	ID 1A33 Type 92	Dispatch [X] 04/03/2004 1141 Arrival [X] 04/03/2004 1141 Clear [X] 04/03/2004 1704	☐	1	[X] Other	
5	ID 1A4 Type 92	Dispatch [X] 04/03/2004 1120 Arrival [X] 04/03/2004 1120 Clear [X] 04/03/2004 1149	☐	1	[X] Other	
6	ID 1A41 Type 92	Dispatch [X] 04/03/2004 1259 Arrival [X] 04/03/2004 1259 Clear [X] 04/03/2004 1452	☐	1	[X] Other	
7	ID 1A6 Type 92	Dispatch [X] 04/03/2004 1235 Arrival [X] 04/03/2004 1235 Clear [X] 04/03/2004 1928	☐	1	[X] Other	
8	ID 1A61 Type 92	Dispatch [X] 04/03/2004 1225 Arrival [X] 04/03/2004 1225 Clear [X] 04/03/2004 1826	☐	1	[X] Other	
9	ID 1A62 Type 92	Dispatch [X] 04/03/2004 1438 Arrival [ ] Clear [X] 04/03/2004 1928	☐	1	[X] Other	
10	ID 1A63 Type 92	Dispatch [X] 04/03/2004 1120 Arrival [X] 04/03/2004 1125 Clear [X] 04/03/2004 1840	☐	1	[X] Other	
11	ID 1E10 Type 11	Dispatch [X] 04/03/2004 1239 Arrival [ ] Clear [X] 04/03/2004 1655	☐	4	[X] Suppression	
12	ID 1E14 Type 11	Dispatch [X] 04/03/2004 1119 Arrival [ ] Clear [X] 04/03/2004 1559	☐	4	[X] Suppression	
13	ID 1E15 Type 11	Dispatch [X] 04/03/2004 1136 Arrival [X] 04/03/2004 1141 Clear [X] 04/03/2004 1458	☐	4	[X] Suppression	
14	ID 1E4 Type 11	Dispatch [X] 04/03/2004 1119 Arrival [ ] Clear [X] 04/03/2004 1658	☐	4	[X] Suppression	

Type of Apparatus or Resource

Ground Fire Suppression
- 11 Engine
- 12 Truck or aerial
- 13 Quint
- 14 Tanker & pumper combination
- 16 Brush truck
- 17 ARF (Aircraft Rescue and Firefighting)
- 10 Ground fire suppression, other

Heavy Ground Equipment
- 21 Dozer or plow
- 22 Tractor
- 24 Tanker or tender
- 20 Heavy equipment, other

Aircraft
- 41 Aircraft: fixed wing tanker
- 42 Helitanker
- 43 Helicopter
- 40 Aircraft, other

Marine Equipment
- 51 Fire boat with pump
- 52 Boat, no pump
- 50 Marine apparatus, other

Support Equipment
- 61 Breathing apparatus support
- 62 Light and air unit
- 60 Support apparatus, other

Medical & Rescue
- 71 Rescue unit
- 72 Urban search & rescue unit
- 73 High angle rescue unit
- 75 BLS unit
- 76 ALS unit
- 70 Medical and rescue unit, other

Other
- 91 Mobile command post
- 92 Chief officer car
- 93 HazMat unit
- 94 Type 1 hand crew
- 95 Type 2 hand crew
- 99 Privately owned vehicle
- 00 Other apparatus/resource

More apparatus? Use additional sheets.

NN None
UU Undetermined

Evansville Fire Department - 550 SE 8th Street, Evansville, IN 47713 812-435-6235

A

82001	IN	04/03/2004	116	0411186	00	☐ Delete ☐ Change	**NFIRS - 9 Apparatus or Resources**
FDID	State	Incident Date	Station	Incident Number	Exposure		

B Apparatus or Resource (Use codes listed below)	Dates and Times (Check if same date as alarm date)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
15 ID 1E6 Type 11	Dispatch [X] 04/03/2004 1119 Arrival [ ] Clear [X] 04/03/2004 1413	☐	4	[X] Suppression	
16 ID 1L1 Type 12	Dispatch [X] 04/03/2004 1129 Arrival [X] 04/03/2004 1133 Clear [X] 04/03/2004 1702	☐	4	[X] Suppression	
17 ID 1Q16 Type 13	Dispatch [X] 04/03/2004 1119 Arrival [X] 04/03/2004 1122 Clear [X] 04/03/2004 1713	☐	4	[X] Suppression	
18 ID 1Q9 Type 13	Dispatch [X] 04/03/2004 1123 Arrival [X] 04/03/2004 1129 Clear [X] 04/03/2004 1505	☐	4	[X] Suppression	
19 ID 1R1 Type 71	Dispatch [X] 04/03/2004 1119 Arrival [ ] Clear [X] 04/03/2004 1649	☐	2	[X] Suppression	
20 ID 1R3 Type 71	Dispatch [X] 04/03/2004 1327 Arrival [X] 04/03/2004 1327 Clear [X] 04/03/2004 1509	☐	2	[X] Suppression	

Type of Apparatus or Resource

Ground Fire Suppression
- 11 Engine
- 12 Truck or aerial
- 13 Quint
- 14 Tanker & pumper combination
- 16 Brush truck
- 17 ARF (Aircraft Rescue and Firefighting)
- 10 Ground fire suppression, other

Heavy Ground Equipment
- 21 Dozer or plow
- 22 Tractor
- 24 Tanker or tender
- 20 Heavy equipment, other

Aircraft
- 41 Aircraft: fixed wing tanker
- 42 Helitanker
- 43 Helicopter
- 40 Aircraft, other

Marine Equipment
- 51 Fire boat with pump
- 52 Boat, no pump
- 50 Marine apparatus, other

Support Equipment
- 61 Breathing apparatus support
- 62 Light and air unit
- 60 Support apparatus, other

Medical & Rescue
- 71 Rescue unit
- 72 Urban search & rescue unit
- 73 High angle rescue unit
- 75 BLS unit
- 76 ALS unit
- 70 Medical and rescue unit, other

Other
- 91 Mobile command post
- 92 Chief officer car
- 93 HazMat unit
- 94 Type 1 hand crew
- 95 Type 2 hand crew
- 99 Privately owned vehicle
- 00 Other apparatus/resource

More apparatus? Use additional sheets.

NN None
UU Undetermined

Post Incident Natural Gas Reading at 3307 Lincoln Av.

Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1:30pm	63 LEL	50 LEL	20 LEL	60 LEL	10 LEL	9 GAS	46 LEL	60 LEL	16 LEL	2.5 LEL	3 LEL	15 LEL	55 LEL	21 LEL	50 LEL
2:45pm	63 LEL	50 LEL	20 LEL	70 LEL	70 LEL	14 LEL	55 LEL	40 LEL	7 LEL	0	0	0	0	14 LEL	0
3:15pm	62 LEL	66 LEL	5 LEL	63 LEL	72 LEL	6 GAS	35 LEL	34 LEL	4 LEL	0	0	0	.2 LEL	1.6 LEL	1.1 LEL
3.45pm	58 LEL	7.2 LEL	16 LEL	68 LEL	84 LEL	72 LEL	38 LEL	26 LEL	3.3	0	0	0	0.2	4.7 LEL	0
4:38pm	61 LEL	7.8 LEL	.8 LEL	39 LEL	24 GAS	90 LEL	60 LEL	21 LEL	4.3 LEL	.3 LEL	.4 LEL	.5 LEL	1.2 LEL	1.8 LEL	0
5:10pm	45 LEL	8 LEL	2 LEL	34 LEL	11 GAS	10 GAS	34 LEL	21 LEL	4 LEL	04 LEL	04 LEL	04 LEL	1.2 LEL	3.5 LEL	.6 LEL

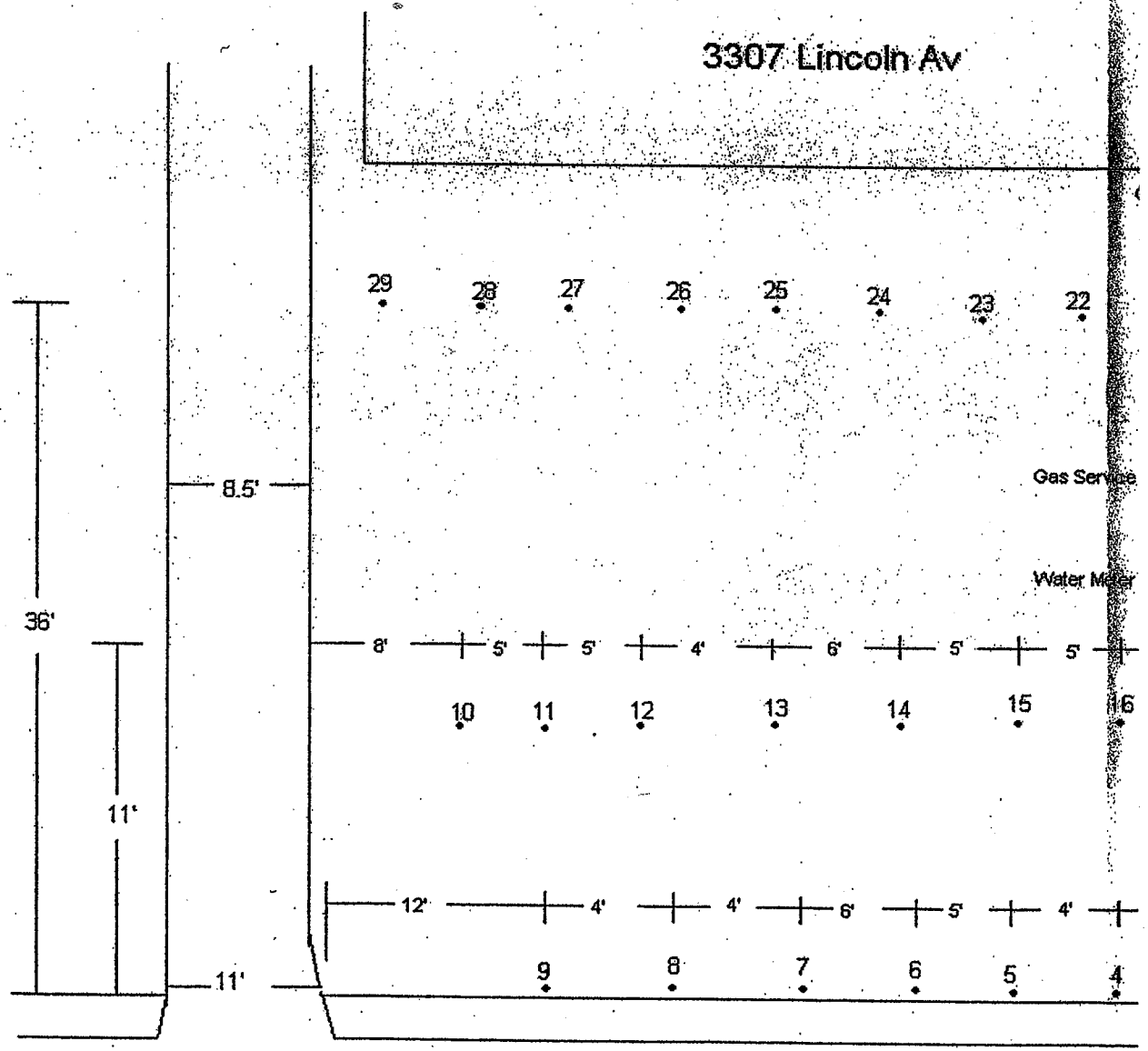
Time	16	17	18	19	20	21	22	23	24	25	26	27	28
1:30pm	5.5 LEL	1.5 LEL	2.1 LEL	2 LEL	0	32 LEL	15 LEL	15 LEL	11 LEL	3 LEL	3 LEL	7 LEL	3 LEL
2:45pm	3.5 LEL				0	23 LEL	8 LEL	8 LEL	0	0	0	0	0
3:15pm	3.4 LEL	1.2	0										
3.45pm	0.8	0.3	0										
4:38pm	.4 LEL	1.2	0										
5:10pm	.5 LEL	1											

Test holes 19 through 28 were not accesable after the 2:45pm test due to the excuvation of debris from the building obstructing access.

Exhibit # 16

PAGE 1 OF 4

Exhibit # 16


3307 Lincoln Av
29
28
27
26
25
24
23
22
Gas Service
Water Meter
8.5'
36'
8'
5'
5'
4'
6'
5'
5'
10
11
12
13
14
15
16
11'
12'
4'
4'
6'
5'
4'
9
8
7
6
5
4
11'